Jurnal Akuntansi, Keuangan, Perpajakan dan Tata Kelola Perusahaan (JAKPT)
Volume 2 No 1 – September 2024
e ISSN: 3025-9223

STRATEGY TO INCREASE THE TAX RATIO THROUGH DIGITAL ECONOMY TAXATION: REVIEW OF LESSONS FROM ASEAN COUNTRIES

Loso Judijanto
IPOSS, Jakarta
losojudijantobumn@gmail.com

Received: 27-07-2024	Revised: 07-08-2024	Approved: 25-08-2024

ABSTRACT

This study aims to investigate the effect of tax increase strategies on the Tax Revenue Ratio, moderated by the Digital Economy in Indonesia. The data used is panel data consisting of 60 observations over a specific period. The analysis was conducted using multiple linear regression methods and other statistical tests to examine the research hypotheses. The analysis results indicate that, although there are initially intriguing indications, there is insufficient statistical evidence to support a significant effect of the tax increase strategy on the Tax Revenue Ratio within the context of the sample studied. Similarly, the Digital Economy does not appear to have a significant influence on the Tax Revenue Ratio. Additionally, there is no significant moderating effect of the Digital Economy on the relationship between the tax increase strategy and the Tax Revenue Ratio. Nonetheless, this study's findings provide valuable insights for further understanding the dynamics between tax strategies, the digital economy, and the Tax Revenue Ratio. The policy implications of these findings underscore the need for further research and a deeper understanding of the factors influencing the Tax Revenue Ratio in Indonesia, particularly in facing the challenges and opportunities of the continuously evolving digital economy.

Keywords: *Tax Increase Strategy, Digital Economy, State Tax Revenue, Tax Policy, Digital Economy Dynamics*

INTRODUCTION

In this era of globalization, the development of digital technology has changed the ecosystem significantly, including in Indonesia (Aminullah et al., 2022). The digital economic phenomenon has influenced various aspects of life, including how consumers shop, run businesses, and collect government revenues. Along with the rapid growth of the digital economy, new challenges arise in tax regulation and collection in the digital era (Chedzhemov & Korotaeva, n.d.). Tax revenue from the digital economy sector is still a challenge for many countries, including Indonesia. To overcome this, an appropriate strategy is needed to increase the tax ratio or the ratio of taxes to gross domestic product (GDP). One strategy being considered is the application of taxes on digital economic transactions (Rumata & Sastrosubroto, 2020).

This research explores practical strategies for increasing the tax ratio through implementing taxes in Indonesia's digital economy. To support this aim, this research will also look at lessons and experiences from other ASEAN countries that have implemented similar measures. Through this approach, this research can provide valuable insight for policymakers, practitioners, and teachers in developing tax strategies that are appropriate to the development of the digital economy in Indonesia. Thus, this research has the potential to increase state tax revenues and create a fairer and more sustainable business environment for digital economy players in Indonesia.

The digital economy refers to all economic activities online or through digital technology. It covers various activities, including electronic sales and purchases of goods and services, e-commerce platforms, online advertising, digital payments, cloud computing services, and more(Bukht & Heeks, 2017). In the digital economy,

transactions are carried out over the Internet or other computer networks, often using special platforms or applications that facilitate interaction between businesses and consumers(Viriyasitavat et al., 2019). This creates new opportunities for business actors to reach wider markets, increase operational efficiency, and expand their business models. The digital economy also creates new challenges, especially related to regulations, data security, privacy, and unequal access to technology. Therefore, a deep understanding of the digital economy and the ability to manage its impact is key to responding to the challenges and exploiting the opportunities offered by the information and communications technology revolution (Finck, 2018).

Tax Ratio is the ratio of taxes to a country's gross domestic product (GDP). This is a measure used to evaluate how much tax revenue a government generates about the size of the country's economy (Ansari, 1982). Tax Ratio is often used as an indicator to measure the level of effectiveness of a country's taxation system (Haldenwang, 2010). The higher the Tax Ratio, the greater the tax contribution to national income, which can reflect the financial health of a country and its ability to finance government spending and meet people's needs. Tax Ratio is an important indicator in evaluating a country's financial health and the effectiveness of the tax system. Experts often use the Tax Ratio as a tool to compare tax revenue levels between countries, as well as to monitor changes in tax structures over time(Cabaleiro et al., 2013). In the context of globalization and the development of the digital economy, experts also pay attention to how the digital economy affects a country's Tax Ratio (Dahlman et al., 2016). Their research and analysis regarding the influence of the digital economy on taxes, effective tax strategies, and lessons learned from the experiences of other countries provide an important basis for making tax policies relevant to current economic challenges and opportunities.

Several strategies can be implemented to increase the Tax Ratio through taxation in the digital economy in Indonesia. First, the government can introduce a binding tax policy for digital economic transactions, such as online sales of goods and services and other digital services. This move will broaden the tax base by attracting revenue from this fast-growing sector of the economy. Apart from that, collaboration with digital economic platforms is also an important strategy. Through partnerships with these platforms, the government can improve tax compliance by facilitating data exchange and offering tax incentives for platforms that comply with applicable tax regulations. An automatic tax collection system can also be developed to simplify the tax payment process for digital business actors.

Strengthening the online tax reporting system is also an essential step. By increasing the convenience and security of reporting and paying taxes online, it is hoped that it can reduce gaps in fulfilling tax obligations and increase efficiency in tax collection. Apart from that, strict law enforcement is also needed to tackle tax violations in the digital economy. Tax audits, investigations and law enforcement against tax violators must be strengthened to ensure compliance with applicable tax regulations. Tax education and awareness for the public and business actors are no less important. Through education about tax obligations in the digital economy and the consequences of tax violations, it is hoped that voluntary tax awareness and compliance can be increased (Araújo Marques et al., 2020).

Table 1.
Percentage of Conventional Tax Growth in ASEAN Countries

Negara	2023 Ekonomi Digital	Growth From 2022 (%)	Subject to Conventional Tax (%)
Indonesia	40	25	40
Malaysia	30	20	50
Singapura	50	18	60
Thailand	25	22	35
Filipina	20	30	30
Vietnam	15	28	25
Myanmar	5	35	10
Kamboja	3	40	15
Laos	2	15	20
Brunei	1	10	50

Lastly, international cooperation is also important in increasing the Tax Ratio through digital economy taxes. Collaboration with other countries, especially in the ASEAN region, can help develop a consistent and effective tax framework in facing the challenges of the digital economy together.

LITERATURE REVIEW

Tax Revenue Strategy

Tax revenue strategy is a plan or method designed by a government or tax authority to optimize tax collection sustainably and efficiently. The main aim is to ensure the government has sufficient financial resources to finance public services and development projects without hampering economic growth or encouraging tax evasion. This strategy involves various approaches, including expanding the tax base, adjusting tax rates, simplifying the tax system, implementing technology to digitize and automate tax processes, and encouraging economic growth that naturally increases tax revenues. This strategy also considers international cooperation to prevent tax avoidance and secure tax revenues from cross-border activities. Tax Revenue Strategy is a variable used to measure a government or tax agency's effectiveness of tax collection strategies. The measurement scale for this variable can be quantitative, which refers to the total amount of tax revenue collected in a certain period, or qualitative, which measures the effectiveness of strategies in terms of taxpayer compliance, administrative efficiency, and fairness in the tax system. This measurement is usually done through historical data analysis, surveys, and tax agency performance assessments. Data sources for the Tax

Revenue Strategy variable can come from government financial reports, tax agency databases, official publications, and related research studies. The data obtained is then analyzed to evaluate the success and areas of improvement in the tax collection strategy implemented.

Tax Ratio

Tax Ratio is a measure used to evaluate the tax burden relative to a country's economy. Tax Ratio is the ratio between the total tax revenue collected by the government and the country's Gross Domestic Product (GDP). Expressed as a percentage, this ratio gives an idea of the proportion of the economy allocated to tax payments. The formula for calculating the Tax Ratio is:

$$\text{Tax Ratio} = (\text{Total Gross Domestic Product} / \text{Tax Revenue}) \times 100\%$$

Tax Ratio is an important indicator in fiscal policy analysis because it provides insight into the level of tax burden borne by society and the business sector. A higher ratio indicates a greater tax burden, while a lower ratio indicates a lighter one. Tax ratio analysis can help policymakers assess the effectiveness of the tax system and plan tax reforms appropriate to the country's economic conditions. Data sources for calculating the Tax Ratio usually come from government financial reports, national economic statistical data, and official publications from statistical institutions or tax institutions.

Digital Economy

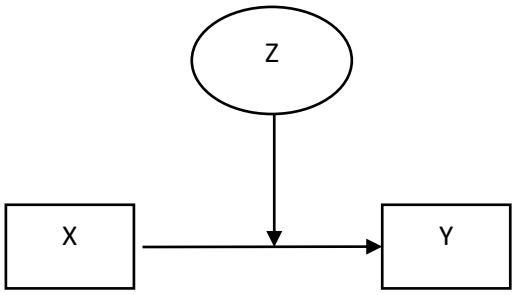
The digital economy is a part of the global economy that uses digital technology and internet networks as the main platform for business activities and transactions. The digital economy includes various aspects such as e-commerce, online banking, digital markets, social media, information technology, and cloud-based services. In the digital economy, products and services can be created, promoted, sold, and distributed digitally. This allows businesses to reach a wider market with lower operational costs than traditional methods. The digital economy also facilitates innovation and economic growth by encouraging the development of new technologies, creating job opportunities, and increasing efficiency and productivity. The digital economy has become increasingly important in the last decade due to increased internet penetration and the use of digital devices worldwide. It has changed how people interact, transact, and do business, affecting almost every industry sector. The digital economy can be measured using various quantitative variables, such as income from e-commerce, internet use, investment in information and communication technology (ICT), and the digital economy index. Revenue from e-commerce is measured in currency and reflects total online transaction revenue, while internet usage is measured as the percentage of the population that uses the internet. ICT investment refers to total investment in technology and is measured in currency. The digital economy index is a score that combines various indicators to provide a general picture of the health of a country's digital economy

RESEARCH METHODOLOGY

This research uses a documentary research approach as a basis for exploring variables of interest. The documentary sources used consist of tax complexity index

statistics developed by other researchers and the institutional publication World Governance Indicators (WGI) by the World Bank (Scott, 2014). The data will then be analyzed quantitatively. The Tax Ratio used as the basis for documentary research comes from the Tax Complexity Index (TCI) for the dependent variable (Hoppe et al., 2023). This study also integrates the WGI indicator for Strategy as an independent variable moderated by the Digital Economy. The data covers one hundred countries taken from the TCI database in 2023.

In 2023, the Tax Complexity Index (TCI) conducted a study comparing the complexity of tax systems across ten countries as part of its effort to provide an extensive cross-country comparative analysis. The TCI employs a scoring system that ranges from zero, indicating a simple and efficient tax system, to one, representing a highly complex tax system (Hoppe et al., 2023). It was observed that no country achieved a score of either extreme, highlighting the absence of a perfect tax system. Additionally, the study examined regulatory quality and government effectiveness as governance indicators, rating these factors on a scale from -2.5 to +2.5. This approach to measuring Worldwide Governance Indicators (WGI) sets this dataset apart from others, covering aspects not addressed by other indices. The application of WGI has gained attention among policymakers and experts, even influencing the allocation of significant funding by the US government in grants to various countries based on these metrics(Kaufmann et al., 2011). For the regression model, this research uses linear regression. Through this approach, it is hoped that research can provide in-depth insight into the relationship between tax complexity, regulatory quality, government effectiveness and Tax Ratio in Indonesia (Weisberg, 2005).



Research Model

In the moderation model, the relationship between the independent variable X and the dependent variable Y, which describes the influence of X on Y, is influenced by the presence of moderator Z. This model assumes that the relationship between. Thus, the estimation model for the dependent variable Y can be formulated as follows:

$$Y=\beta0+\beta1X+\beta2W+\beta3(X\times Z) + \varepsilon \quad (1)$$

Y : Dependent variable (Tax Ratio).
X : Main independent variable (Strategy).
Z : Moderator variable (Digital Economy).
β0, β1, β2, β3 : These are regression coefficients.
(X×Z) :Interaction between variables X and Z shows how variable Z moderates the relationship between X and Y.
ε : Random error

In the context of this research, this model will be used to test the moderating effect of government effectiveness (Z) on the relationship between tax complexity (X) and Tax Ratio (Y). By analyzing this relationship, it is hoped that we can find out how government effectiveness moderates the influence of tax complexity on the Tax Ratio in Indonesia. The data sets will next be analyzed using SPSS version 27. To enable moderation analysis into a single computation, the PROCESS system is integrated with SPSS, and that developed(Stehlik-Barry & Babinec, 2017).

RESULTS AND DISCUSSION

Descriptive Statistics and Correlations

This section discusses the results of analysis using SPSS regarding the influence of tax increase strategies with digital economy moderation on state tax revenues (Ries, 2009). Apart from that, a brief discussion regarding comparisons with performance achievements/tax revenues from other countries' digital economies. It also discusses the differences between conventional tax practice strategies and the challenges that must be faced to realize these strategies. Table 2 reveals, First, for the tax revenue strategy variable, the data shows a range of values from 65.00 to 88.00 with an average of 75.8333, accompanied by a standard deviation of 6.28198. This indicates that the values for tax revenue strategy tend to cluster close to their mean values, indicating moderate variability. In the case of Tax Ratio, the value of this variable ranges from 75.00. to 95.00 with a higher average than tax revenue strategy variable, namely 83.4167, and a standard deviation of 7.44993. This difference

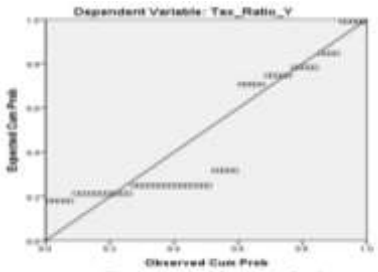


Figure 1. P-Plot Tax_Ratio

Indicates greater variability in Tax Ratio compared to tax revenue strategy variable, which could indicate the existence of external factors that influence the tax ratio more varied.

Furthermore, the Digital Economy variable has a similar range of values to the tax revenue strategy, namely from 65.00 to 88.00, with a slightly lower mean, 75.6167, and a similar standard deviation, 6.21396. This shows that the two variables have a similar data distribution, which could indicate a similar relationship or characteristic between the two aspects of the sample being measured. However, the Strategy variable moderated by the digital economy stands out with a wide range of values, from 4225.00 to 7744.00, and a mean of 5767.1000, accompanied by a large standard deviation of 923.42720. This significant variability suggests that the combination of tax revenue strategy and the Digital Economy in an economic context produces wider variations, which may reflect the complex influence of strategy and the digital economy on economic models.

Table 2.
Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Strategyc_X	60	65,00	88,00	75,8333	6,28198
Tax_Ratio_Y	60	75,00	95,00	83,4167	7,44993
Digital_Economy_Z	60	65,00	88,00	75,6167	6,21396
StrX_Mod_EkonZ	60	4225,00	7744,00	5767,1000	923,42720
Valid N (listwise)	60				

Table 3.
Tests of Normality

	Statistic	df	Sig.
Strategyc_X	,219	60	,000
Tax_Ratio_Y	,187	60	,000
Digital_Economy_Z	,190	60	,000

The normality test results in Table 3 show that the data distribution for the tax revenue strategy, Tax Ratio, and Digital Economy variables deviates from the normal distribution. This is indicated by the significance value (Sig.) recorded as .000 for the three variables, which means the p-value is very low (less than 0.001), indicating strong evidence to reject the null hypothesis, which states the data follows a normal distribution. With statistical values of .219 for tax revenue strategy, 187 for Tax Ratio, and .190 for Economy Digital, and the same degrees of freedom (df) of 60 for all three, these results indicate a significant deviation from normality. The Lilliefors Significance Correction applied in this analysis is particularly relevant for small sample sizes, adjusting the normality evaluation to provide more accurate results. These findings underscore the importance of considering the actual data distribution in selecting subsequent statistical analysis methods, as many techniques require assumptions about the normality of the data distribution. The data for these three variables do not follow a normal distribution pattern, which influences the statistical analysis approach used.

Table 4.
Correlations

		Strategyc_X	Tax_Ratio_Y	Digital_Economy_Z	StrX_Mod_EkonZ
Strategyc_X	Pearson Correlation	1	.907**	.855**	.962**
	N	60	60	60	60
Tax_Ratio_Y	Pearson Correlation	.907**	1	.807**	.889**
	N	60	60	60	60
Digital_Economy_Z	Pearson Correlation	.855**	.807**	1	.962**
	N	60	60	60	60
StrX_Mod_EkonZ	Pearson Correlation	.962**	.889**	.962**	1
	N	60	60	60	60

Table 4 shows the results of the correlation analysis between the four Tax revenue strategies, Tax Ratio, Digital Economy and Strategy moderated by the digital economy, with each variable having a total of 60 observations. The correlation is significant at the 0.01 level (2-tailed), indicating a strong and positive relationship between the variables -these variables. Tax revenue strategy has a very high correlation with Tax Ratio (.907), Digital Economy (.855), and especially with Strategy moderated by the digital economy (.962), which indicates that increasing the value of Tax revenue strategy is closely related to increasing values on other variables. Likewise, the Tax Ratio shows a strong correlation with the Digital Economy (.807) and Strategy, moderated by the digital economy (.889), confirming the positive correlation pattern between these variables. The highest correlation recorded was between the Digital Economy and Strategy moderated by the digital economy (.962), indicating that the two variables move together very closely. These findings indicate a strong and significant relationship between the four variables, indicating that they are significantly interrelated in the sample studied. The high correlation between these variables can provide important insights for further studies regarding the dynamics between strategy, tax ratios, digital economy, and integrated economic models.

Based on the P-P (Probability-Probability) graph shown in Figure 1, the regression model fits well because most residuals follow a normal distribution pattern. However, several outliers or extreme points may require further investigation. This deviation may be caused by homogeneity of variance (homoscedasticity) or the influence of unusual data on the model. To obtain more accurate conclusions and specific recommendations, deeper analysis of biased data and examination of other regression model assumptions, such as linearity and independence, need to be carried out.

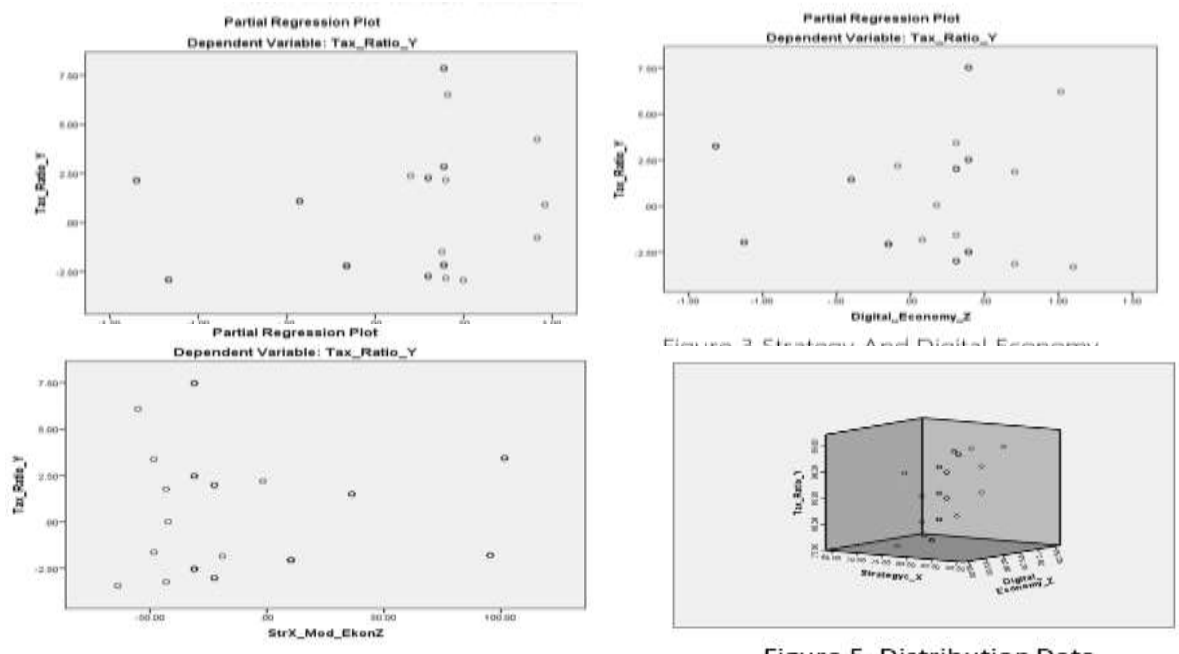


Figure 4 Strategy and Economy Digital as Moderation

Figure 5. Distribution Data

In Figure 2, this partial regression plot displays the relationship between the tax revenue strategy variable and the dependent variable, the Tax Revenue Ratio, by

controlling for the effects of other variables in the model. The plot shows no strong linear relationship between tax revenue strategy and the Tax Revenue Ratio because the data points are spread widely and do not form a linear pattern. No indication of a consistent positive or negative gradient can be seen from these data points.

Figure 3 shows no strong evidence to state that the Digital Economy linearly influences the Tax Revenue Ratio in this model after controlling for other variables. However, before making a final decision regarding the significance of the Digital Economy, it is necessary to review the distribution of this variable and its relationship with other variables in the model, as well as consider the possibility of a non-linear relationship or the presence of other confounding factors that might influence the relationship between the digital economy and the tax ratio. From Figure 4, this partial regression plot shows the relationship between Strategy and Digital Economy as Moderation and the dependent variable, Tax Revenue Ratio, by eliminating the influence of other variables from the model. The data appears scattered and needs to show a clear pattern, indicating that there is not a strong linear relationship between these two variables. Scattered observations across the graph area indicate that Strategy and Digital Economy as Moderation may have a different relationship with the Tax Revenue Ratio or have minimal impact.

Regression Analysis

Table 5.
ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2705,073	3	901,691	88,663	.000b
	Residual	569,511	56	10,170		
	Total	3274,583	59			

Table 6.
Coefficientsa

	Cluster		
	1	2	3
Strategyc_X	86.33	76.81	69.21
Digital_Economy_Z	85.78	76.72	68.95
StrX_Mod_EkonZ	7408.44	5893.75	4776.32

Tabel 7.
Final Cluster Centers

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	4,777	53,448		,089	,929
	Strategyc_X	,900	,703	,759	1,280	,206
	Digital_Economy_Z	,079	,717	,066	,110	,913
	StrX_Mod_EkonZ	,001	,009	,096	,085	,933

Based on Table 7, we can conclude that there are three different groups in the dataset, namely groups with high (Cluster 1), medium (Cluster 2), and low (Cluster 3) levels for strategy, digital economy, and the relationship between the two.

Cluster Analysis

Table 8.
ANOVA Cluster

	Cluster		Error			
	Mean Square	df	Mean Square	df	F	Sig.
Strategyc_X	928.150	2	8.281	57	112.078	.000
Digital_Economy_Z	906.606	2	8.157	57	111.139	.000
StrX_Mod_EkonZ	21705402.536	2	121044.637	57	179.317	.000

ANOVA analysis of the table shows that there are significant differences between clusters in terms of strategy (`Strategyc_X`), digital economy (`Digital_Economy_Z`), and moderation between the two (`StrX_Mod_EkonZ`). A significant F value ($p<0.05$) indicates that there is at least one pair of clusters that differ significantly in these variables. This shows that the clusters formed have significant differences in strategic characteristics, digital economy, and the relationship between the two. This analysis provides a deeper understanding of the differences between clusters and can help in better grouping based on their characteristics. Table 9 shows the number of cases in each cluster. Cluster 2 has the highest number of cases (32), followed by Cluster 3 (19) and Cluster 1 (9). With a total of 60 valid cases, this shows that the distribution of cases in the three clusters is uneven, with most cases concentrated in Cluster 2.

Effects Of The Tax Increase Strategy

Although analysis of variance (ANOVA) shows that the overall regression model has significance, more detailed results show that the coefficient for the tax revenue strategy variable in the model is not significant. With a t value of 1.280 and a significance level (Sig.) of 0.206, the data does not show strong evidence to support the hypothesis that the tax revenue strategy variable has a significant influence on the Tax Revenue Ratio in the analyzed sample. Nevertheless, the relatively high beta value (Beta = 0.759) is interesting and indicates that there may be a potential relationship between the tax revenue strategy variable and the Tax Revenue Ratio that has not been statistically identified in this analysis. A high beta value like this usually indicates that changes in the tax revenue strategy variable have the potential to have a large impact on the Tax Revenue Ratio, provided that the relationship can be confirmed with stronger evidence. These findings lead to the conclusion that, despite interesting initial indications, there is not sufficient statistical evidence to justify that tax revenue strategies significantly influence the Tax Revenue Ratio in the context of the sample studied. Therefore, researchers may need to explore the data further, use a larger sample, or apply different analysis methods to better understand the dynamics between the tax revenue strategy variable and the Tax Revenue Ratio.

The Influence of the Digital Economy on the Tax Revenue Ratio

Table 9.
Number of Cases in each Cluster

Cluster	1	9.000
	2	32.000
	3	19.000
Valid		60.000
Missing		10.000

Further analysis of the regression model shows that the Digital Economy variable, similar to the tax revenue strategy variable, also has an insignificant coefficient. With a t value of 0.110 and a significance level (Sig.) of 0.913, these results confirm that, based on the data analyzed, the Digital Economy does not have a significant influence on the Tax Ratio Y. This is reinforced by the very low beta value (Beta = 0.066), which shows that changes in the Digital Economy have a very small impact, almost no effect, on the Tax Ratio Y. This finding is interesting because the Digital Economy is often considered an important factor that can influence various aspects of the economy, including tax revenues. However, in the context of the sample studied, there does not appear to be a statistically significant relationship between growth or change in the Digital Economy and tax revenue levels, at least not in a way that the regression model can measure used.

The Influence of Tax Revenue Strategy on the Tax Revenue Ratio Moderated by the Digital Economy

In the subsequent analysis of the regression model, it was found that the coefficient for the interaction variable, namely the tax revenue strategy moderated by the Digital Economy (Tax et al. X Digital Economy), was also not significant. With a t value of 0.085 and a very high level of significance (Sig.), namely 0.933, the data shows that there is no significant moderating effect of the Digital Economy on the relationship between tax revenue strategy and the Tax Revenue Ratio in the analyzed model. The very small non-normalized coefficient (B = 0.001) further confirms that the interaction between tax revenue strategy and the Digital Economy does not appear to have a significant contribution to the Tax Revenue Ratio. These findings indicate that, in the context of the sample studied, the Digital Economy does not act as a significant moderating variable in influencing the effectiveness of tax revenue strategies in increasing the Tax Revenue Ratio. In other words, improvements or changes in the Digital Economy do not significantly affect how tax revenue strategies contribute to the Tax Revenue Ratio.

Comparison of Performance Achievement/Tax Revenue from the Digital Economy of Indonesia and Other Countries in Asia

Table 10.
Digital Tax Achievements of ASEAN Countries

Country	Type of Tax	Tax Rate	Comes into Effect	Special Notes
Indonesia	VAT on digital services	10%	July 2023	Applies to foreign digital service providers without a physical presence in Indonesia.
Singapura	GST on digital services	7%	January 202	Foreign digital service providers must register for GST if their revenue exceeds S$1 million.
Malaysia	Service Tax on digital services	6%	January 202	Applies to foreign digital service providers providing services to consumers in Malaysia.
Filipina	Digital tax proposal	-	In discussion	Various digital tax proposals, including taxes on streaming services and e-commerce, are being discussed.
Thailand	VAT on e-Services	7%	Sep-21	Foreign digital service providers are required to register and pay VAT if revenue exceeds 1.8 million baht.
Vietnam	VAT and CIT on digital services	10% VAT, CIT varies	2020	Foreign companies must register and pay VAT and CIT for digital services.

Source: Ministry of Finance Of Indonesia 2022

Foreign companies must register and pay VAT. From Table 7, countries in the ASEAN region have taken significant steps to adapt their tax systems to the growth of the digital economy. With the increase in digital transactions crossing national borders, governments in the region have introduced various digital tax policies to ensure that income from digital economic activities can be taxed fairly and effectively for digital services. Indonesia, one of the largest digital markets in ASEAN, began implementing a Value Added Tax (VAT) of 10% on digital services provided by foreign companies without a physical presence in the country in July 2020. This policy is designed to create more balanced competition between local and foreign companies and increase state revenues from the digital sector. Singapore, known for its advanced digital ecosystem, has implemented a 7% Goods and Services Tax (GST) on foreign digital services since January 2020. The move requires foreign digital service providers to register and collect GST if their revenue from consumers in Singapore exceeds S$1 million, demonstrating the country's commitment to tax fairness in the digital economy. Malaysia is also still catching up with implementing a 6% service tax on digital services from foreign providers, which came into effect in January 2020. This policy targets foreign digital service providers serving Malaysian consumers, ensuring they contribute to the country's revenue.

Although the Philippines is still discussing its digital tax policy, it has shown strong interest in the proposed tax on digital services, including streaming services and e-commerce transactions. This signals possible future tax policy changes to adapt to the

evolution of digital markets. Thailand, which passed an e-Service tax law in 2020, began requiring foreign digital service providers to register and pay VAT of 7% if their revenue from Thai consumers exceeds 1.8 million baht, effective September 2021. This is an important step to ensure tax fairness in the digital economy. Vietnam has taken a similar approach by requiring foreign companies providing digital services to register and pay VAT at 10% and Corporate Income Tax (CIT) at varying rates, taking effect in 2020. This shows Vietnam's commitment to adapting its tax system to suit the development of the digital economy.

Overall, ASEAN countries are actively adapting their tax policies to capture the revenue potential of the rapidly expanding digital economy. By taxing digital services, they seek to create a fairer environment for all players in the market, both local and foreign, while increasing tax revenues for economic development. Indonesia's digital economic performance achievements stand out in Southeast Asia thanks to digital innovation, investment support, progressive regulations, and significant domestic market potential. The government is making strong efforts to secure this position by encouraging more innovation and investment in the digital economy while facilitating the development of a dynamic and inclusive digital ecosystem. Based on an article from Kominfo, Coordinating Minister for Economic Affairs Airlangga Hartarto emphasized that Indonesia's digital economy occupies the highest position in Southeast Asia. With the value of the digital economy reaching around USD 70 billion in 2021 and projections that will increase sharply to USD 146 billion in 2025, this marks a significant surge that places Indonesia as a leader in the digital economic sector in the region.

The main factors that played a role in this achievement include a shift in people's behavior towards using digital platforms in various sectors and a favorable investment trend, recorded at 4.7 billion USD during the first quarter of 2021. This amount exceeded the highest investment value in the last four years, placing Indonesia as Southeast Asia's most popular investment destination and surpassing Singapore. This is supported by the value of e-commerce transactions, which reached IDR 401.25 trillion in 2021, with a transaction volume of 1.73 billion. This was what Airlangga Hartarto said in a statement at the Initial Public Offering of Shares of PT GoTo Gojek Tokopedia Tbk. President Joko Widodo, in his online remarks, appreciated the IPO of PT GoTo Gojek Tokopedia Tbk shares because he considered it able to motivate young Indonesians to provide new energy for leaps in Indonesia's economic progress. PT GoTo Gojek Tokopedia Tbk, as Indonesia's first decacorn, presents a successful example of a start-up initiative that can attract investor interest and encourage more involvement in the digital economy(Kominfo, 2022). In its response, the Indonesian government is committed to creating a supportive ecosystem for developing the digital economy. This includes preparation of the 2021-2030 digital economy development framework and regulations supporting the digital industry's progress, such as regulations on shares with multiple voting rights issued by the OJK in the previous year.

CONCLUSION

The analysis reveals that neither the tax revenue strategy nor the digital economy significantly influences the Tax Revenue Ratio, as indicated by their insignificant coefficients in the regression model (t values of 1.280 and 0.110, with significance levels of 0.206 and 0.913, respectively). Furthermore, the digital economy does not moderate the relationship between the tax revenue strategy and the Tax Revenue Ratio, as shown

by the interaction variable's t value of 0.085 and significance level of 0.933. Despite these findings, Indonesia and other ASEAN countries have made substantial strides in adapting their tax systems to the digital economy, with Indonesia leading in Southeast Asia through digital innovation, supportive regulations, and a strong domestic market, as part of its 2021-2030 digital economic development framework.

REFERENSI

Aminullah, E., Fizzanty, T., Nawawi, N., Suryanto, J., Pranata, N., Maulana, I., Ariyani, L., Wicaksono, A., Suardi, I., & Azis, N. L. L. (2022). Interactive components of digital MSMEs ecosystem for inclusive digital economy in Indonesia. *Journal of the Knowledge Economy*, 1–31.

Ansari, M. M. (1982). Determinants of tax ratio: a cross-country analysis. *Economic and Political Weekly*, 1035–1042.

Araújo Marques, J., Sousa, P., & Teixeira, G. (2020). Tax audits as a path to tax compliance in Portugal. *European Journal on Criminal Policy and Research*, *26*, 457–479.

Atkinson, G. (1998). Statistical methods for assessing measurement error (reliability) in variables relevant to sports medicine. *Sports Medicine*, *26*(4), 217–238. https://doi.org/10.2165/00007256-199826040-00002

Bukht, R., & Heeks, R. (2017). Defining, conceptualising and measuring the digital economy. *Development Informatics Working Paper*, *68*.

Cabaleiro, R., Buch, E., & Vaamonde, A. (2013). Developing a method to assessing the municipal financial health. *The American Review of Public Administration*, *43*(6), 729–751.

Chedzhemov, G. A., & Korotaeva, T. V. (n.d.). Digital Economy As A Social Phenomenon: Ethical Challenges And Perspectives Of Development. *European Proceedings of Social and Behavioural Sciences*.

Dahlman, C., Mealy, S., & Wermelinger, M. (2016). *Harnessing the digital economy for developing countries*.

Finck, M. (2018). Digital co-regulation: designing a supranational legal framework for the platform economy. *European Law Review*.

Haldenwang, C. von. (2010). *Assessing the tax performance of developing countries*.

Harris, P. (2017). Introducing bootstrap methods to investigate coefficient non-stationarity in spatial regression models. *Spatial Statistics*, *21*, 241–261. https://doi.org/10.1016/j.spasta.2017.07.006

Hoppe, T., Schanz, D., Sturm, S., & Sureth-Sloane, C. (2023). The tax complexity index–a survey-based country measure of tax code and framework complexity. *European Accounting Review*, *32*(2), 239–273.

Kaufmann, D., Kraay, A., & Mastruzzi, M. (2011). The worldwide governance indicators: Methodology and analytical issues1. *Hague Journal on the Rule of Law*, *3*(2), 220–246.

Kominfo. (2022). *Menko Airlangga: Ekonomi Digital di Indonesia Tertinggi di Asia Tenggara*. https://www.kominfo.go.id/content/detail/41127/menko-airlangga-ekonomi-digital-di-indonesia-tertinggi-di-asia-tenggara/0/berita

Lin, B. (2022). Towards world's low carbon development: The role of clean energy. *Applied Energy*, *307*. https://doi.org/10.1016/j.apenergy.2021.118160

Muth, N. D. (2019). Public policies to reduce sugary drink consumption in children and

adolescents. In *Pediatrics* (Vol. 143, Issue 4). https://doi.org/10.1542/peds.2019-0282

Raj, A. (2020). Barriers to the adoption of industry 4.0 technologies in the manufacturing sector: An inter-country comparative perspective. *International Journal of Production Economics*, *224*. https://doi.org/10.1016/j.ijpe.2019.107546

Ries, J. D. (2009). Test-retest reliability and minimal detectable change scores for the timed “up & go” test, the six-minute walk test, and gait speed in people with Alzheimer disease. *Physical Therapy*, *89*(6), 569–579. https://doi.org/10.2522/ptj.20080258

Rumata, V. M., & Sastrosubroto, A. S. (2020). The paradox of Indonesian digital economy development. *E-Bus High Educ Intell Appl*.

Scott, J. (2014). *A matter of record: Documentary sources in social research*. John Wiley & Sons.

Stehlik-Barry, K., & Babinec, A. J. (2017). *Data analysis with IBM SPSS statistics*. Packt Publishing Ltd.

Thow, A. M. (2018). Fiscal policy to improve diets and prevent noncommunicable diseases: From recommendations to action. *Bulletin of the World Health Organization*, *96*(3), 201–210. https://doi.org/10.2471/BLT.17.195982

Viriyasitavat, W., Da Xu, L., Bi, Z., & Pungpapong, V. (2019). Blockchain and internet of things for modern business process in digital economy—the state of the art. *IEEE Transactions on Computational Social Systems*, *6*(6), 1420–1432.

Weisberg, S. (2005). *Applied linear regression* (Vol. 528). John Wiley & Sons.