Population Moderation as the Affect of Regional Taxes, Levies and GRDP on Regional Genuine Income

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ABSTRACT

Regional capability in implementing and realizing regional autonomy can be seen and measured from the realization of Regional Genuine Income, this is because RGI is part of the largest financial source for the implementation of regional autonomy. Regional Taxes and Regional Levies are important components in contributing to an increase in RGI. This research takes several variables that are thought to affect RGI including regional taxes, Regional Levies, Gross Regional Domestic Income (GRDP) and the moderating variable, namely population. This research was conducted to find out whether the independent variables, namely the independent factors that have been described previously, can affect the dependent variable, namely Regional Genuine Income. This research was tested using the Eviews application. The test results show that regional taxes have an effect on Regional genuine income, Regional Levies and GRDP have no effect on regional genuine income, the population moderates regional taxes, and the population does not moderate Regional Levies and GRD.

Keywords: Regional Taxes, Regional Levies, GRDP, Population, RGI

1. INTRODUCTION

Banten Province is a province in Tanah Pasundan which has the westernmost region on the island of Java, Indonesia. Before the regional expansion in 2000 based on Law No. 23 of 2000, Banten Province was part of West Java Province. Banten Province currently has four districts and four cities, namely Pandeglang Regency, Lebak Regency, Tangerang Regency, Serang Regency, Tangerang City, Cilegon City, Serang City and South Tangerang City. Before the regional expansion, Lebak Regency, Pandeglang Regency, Serang Regency, Tangerang Regency and Tangerang City are part of West Java.

The potential of each region is quite large, including Lebak Regency which has potential from fisheries where it can produce 3,172.4 tons/year. The potential of Pandeglang Regency is the plantation sector. The area of people's plantation crops in Pandeglang Regency has increased from year to year, this is based on
records from the Pandeglang Regency Agriculture and Plantation Service. Tangerang Regency in the industrial sector, where income from industry can reach IDR 2.6 trillion. Apart from that, there is still much more potential that can be developed in the Banten province area.

From this existing potential, researchers are interested in examining further what can influence the realization of Banten Province's Original Regional Income revenue in order to improve community welfare. The Realization of Original Regional Income for Banten Province for 2016-2021 can be seen in table 1 below.

### Table 1 Realization of Banten Province Regional Revenue 2016-2021

(Thousand Rupiah)

<table>
<thead>
<tr>
<th>Tahun</th>
<th>Daerah</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pandeglang Regency</td>
<td>387,100,585</td>
<td>196,996,807</td>
<td>218,326,858</td>
<td>189,186,453</td>
<td>196,060,818</td>
</tr>
<tr>
<td></td>
<td>Lebak Regency</td>
<td>467,474,538</td>
<td>349,363,427</td>
<td>334,722,737</td>
<td>377,504,404</td>
<td>385,144,019</td>
</tr>
<tr>
<td></td>
<td>Tangerang Regency</td>
<td>2,786,647,280</td>
<td>2,872,568,513</td>
<td>2,812,933,125</td>
<td>2,465,364,758</td>
<td>2,869,928,724</td>
</tr>
<tr>
<td></td>
<td>Serang Regency</td>
<td>815,399,914</td>
<td>678,085,200</td>
<td>707,865,882</td>
<td>701,215,211</td>
<td>791,086,614</td>
</tr>
<tr>
<td></td>
<td>Tangerang City</td>
<td>1,991,898,969</td>
<td>1,864,385,585</td>
<td>2,027,112,806</td>
<td>1,649,021,201</td>
<td>1,869,216,363</td>
</tr>
<tr>
<td></td>
<td>Cilegon City</td>
<td>652,084,326</td>
<td>578,335,346</td>
<td>634,798,056</td>
<td>717,400,616</td>
<td>630,935,132</td>
</tr>
<tr>
<td></td>
<td>Serang City</td>
<td>232,458,208</td>
<td>164,218,549</td>
<td>190,029,710</td>
<td>180,263,229</td>
<td>206,238,435</td>
</tr>
<tr>
<td></td>
<td>South</td>
<td>1,622,004,639</td>
<td>1,621,710,653</td>
<td>1,817,505,710</td>
<td>1,536,619,696</td>
<td>1,713,722,416</td>
</tr>
</tbody>
</table>

**Source:** Data from the Banten Province Central Statistics Agency.

From table 1 it can be seen that almost all of Banten Province's Regional Genuine Income fluctuates every year. The largest RGI revenues in Banten province come from Tangerang Regency, Tangerang City and South Tangerang City. The third region is a region that focuses on the industrial sector, where industrial growth is very rapid in several regions. Total industry up to 2018 based on data obtained from BPS Banten Province, revealed that in Tanggerang Regency there were 1,131 units, Tanggerang City 731 units and South Tanggerang City 180 units.

The management of diverse resources by the regional government and all societal members—individuals as well as institutions—in order to establish a pattern of cooperation that will foster the creation of new jobs and the growth of regional economic activity is known as regional economic development. This means that the GRDP of Banten Province cannot be separated from the contribution of the community as activators and implementers of activities in various existing resource sectors. The number of buying and selling transactions will rise if the people living in Banten Province are able to contribute to the development of the production of products and services. Therefore, the population plays a crucial role in generating business opportunities that in turn help to open up new businesses that in turn help to reduce poverty. In the long run, the population's ability to generate...
more local original income in Banten Province can also result in the imposition of regional taxes and levies.

Based on its capabilities, RGI is a source of income for the regional administration that comes from within the region. The Republic of Indonesia Law No. 33 of 2004 explains the financial balance between the national and local governments. It states that legitimate regional genuine income comes from separate asset management, regional taxes, and other legitimate sources of regional genuine income. This is used for the purpose of giving a region more freedom in funding the implementation of regional autonomy. A region that has high RGI value means the higher the independence of that region in its economic activities. A region's ability to organize and realize regional autonomy can be seen and measured from the realization of Regional Genuine Income obtained, this is because RGI is the largest financial resource for implementing regional autonomy. According to Juliarini (2020), "the contribution of regional taxes and levies is very important in supporting an increase in RGI, with the implementation of regional autonomy then provides an opportunity for the government to explore the results of regional wealth sourced from RGI." The research being conducted in the area lends credence to this assertion. According to research findings Kusuma & Wirawati, (2013), regional taxes and levies also have an impact on regional real income. Research findings (Sudarmana & Sudiartha, 2020) indicate that there is a relationship between regional taxes and RGI; that is, the more the regional taxes, the larger the RGI that will be received, and vice versa. According to study Setiyawan, (2018), regional taxes have an impact on RGI. This is because they are necessary to fund regional expenditures and development, both of which have an effect on enhancing community welfare.

Based on Law Number 34 of 2000 concerning amendments to Law Number 18 of 1997 concerning regional taxes and regional levies. Regional levies are divided into three groups, namely: Regional General Services Levy, Regional Business Services Levy, Regional Levy for Certain Licensing. Like regional taxes, regional levies also contribute greatly to regional income. Therefore, government officials who have the authority to collect and manage regional levies must have good supervision. According to Sudarmana & Sudiartha, (2020) regional levies affect on RGI, this is in line with Setiyawan, (2018) which states that regional levies affect on RGI because there is a tendency that regional levies have a large contribution to RGI, therefore regional levies must optimized to reflect actual regional financial performance. This research is in contrast to (Nugraheni et al., 2019) which states that regional levies have no affect on RGI.

One of the other factors that can influence RGI is Gross Regional Domestic Product (GRDP). GRDP is a measurement tool commonly used to calculate the economic capacity of a region, where the growth rate fluctuates every year in line with the growth rate of RGI. Likewise with the population, where the population can affect RGI, because with an increase in population growth, the productivity of economic actors will also increase, which will have an impact on economic growth and also have an impact on increasing regional tax revenues because the
community's ability to pay taxes increases. Based on research results Muhammad, (2021) GRDP has an affect on RGI. In keeping with research (Krisnayanthi & Karmini, 2023) that indicates that, provided other factors remain constant, a rise in regional tax revenues will always follow an increase in the gross regional product. This contrasts with studies Muslim et al., (2019) that claims RGI has no discernible impact.

In addition to the variables already discussed, this study includes a moderating variable that is novel to the study: the population. As per the Central Bureau of Statistics (2015), the population comprises all individuals who have lived in a certain region for a minimum of six months and/or those who have lived there for a shorter period but plan to remain. Population growth is not an issue; rather, it is a necessary component that can promote development and economic expansion (Nugraheni et al., 2019). The results of research Asy’ari et al., (2020) show that population moderates regional taxes, meaning that as the population grows, so will regional taxation. On the other hand, if the population decreases, local taxes will decrease. If the population increases, tax income from each tax sector post will increase, which will lead to an increase in regional taxes. The increase in regional taxes will also affect the development of adequate infrastructure. Apart from being able to moderate regional taxes, population can also moderate regional levies in affect RGI. Research by Iman et al., (2019) and Romiyati et al., (2019) shows that population has a positive affect on regional levies and population has an affect on RGI. These findings show that every rupiah received by the government in regional spending such as paying regional taxes and levies and complying with government regulations, will increase regional finances.

According to Waidah & Pernanda, (2020) "In order to achieve prosperity for a region, efforts to increase RGI per capita or income per capita must be accompanied by controlling population growth. The higher the population growth, the higher the population density. If population density continues without control, then increasing per capita income will not achieve satisfactory results. As a result, uncontrolled population growth will cause overpopulation or population explosion. One of the impacts that will occur if a population explosion occurs is high competition in the world of work. If the problem of lack of employment opportunities in an area while the population experiences an extreme increase, this will lead to a lot of unemployment and increasing poverty. Automatically, regional taxes will decrease. However, if the population distribution in an area is spread evenly, it will create a comfortable atmosphere because the distribution is the same, harmonious, creates a conducive atmosphere because it is spread everywhere, and there is a balance between the population so that there will be no population explosion which can cause unemployment levels and per capita income. which increases due to the lack of unemployment, employment opportunities are spread across various locations so that with increased per capita income the prosperity of the people will also improve."

The impact of local taxes, local levies, and the gross regional product (GRDP), which is moderated by population, can be simulated using the problem's
background description. It is intended that the findings of this study will serve as a valuable resource for future research as well as a guide for other scholars who wish to delve deeper into the issues raised in this work. Additionally, information from this research is anticipated to be used in attempts to raise regional taxes and to maintain the optimization of the variables that support raising RGI in the future.

2. THEORETICAL FRAMEWORK AND HYPOTHESIS

Regional autonomy

Regional Autonomy according to Law No. 32 of 2004 concerning Regional Government is “the right, authority and obligation of autonomous regions to regulate and manage their own government affairs and the interests of local communities in accordance with statutory regulations, which implies that the implementation of regional autonomy is based on the principle of broad autonomy”. The most expansive definition of autonomy is one which is grounded in the principle of accountability and proceeds from there in the sense of genuine autonomy; this is not unrestricted autonomy. In order for the area to grow, live, and develop, the concept of real autonomy is applied based on responsibilities, authority, and duties that are in line with its potential and distinctiveness (Widjaja, 2017). Achieving Regional Genuine Income (RGI) in a timely and optimal manner is crucial to meeting development program targets and supporting the administration of government and management of government households. Regional Genuine Income (RGI) is one of the source components of financing for Regency/City government households and government administration.

Regional Genuine Income (RGI)

The term "regional genuine income" (RGI) refers to money received by regional governments from the use of their resources as well as from carrying out public services and activities. This revenue is sometimes used to gauge how far a region has progressed (Nugraheni et al., 2019). Regional genuine income (RGI), regional taxes, regional levies, distinct regional wealth management outcomes, and other valid RGI are examples of regional taxes. According to Law No. 33 of 2004 about Financial Balance between the Central Government and Regional Governments, regional taxes are the rights of regional governments that are acknowledged as increasing the value of net assets. According to PP No. 58 of 2005 concerning Financial Management, all money received through the Regional General Cash Account is included in regional taxes and increases the equity of current funds, which is a regional right in one budget year that is not subject to repayment by the region (Nurwahidah & Abidin, 2021). Regional income is generated by locals' economic activity and comes from a variety of sources, including taxes and levies. Population can affect a region's ability to grow economically and raise RGI. (Oktiani, 2021).
Regional Taxes

Regional taxes are taxes that are collected by regional governments within their jurisdiction. Regional taxes are used to finance regional expenses related to tasks or obligations in managing one's own household in accordance with the laws and regulations within the Unitary State of the Republic of Indonesia. (Nugraheni et al., 2019).

Regional taxes come in a variety of forms, much like central taxes. Province taxes and district/city taxes make up the two categories of regional taxes. The motor vehicle and water vehicle tax, the motor vehicle fuel tax (PBB-KB), the motor vehicle transfer fee tax (BBNKB), the subterranean water collection and usage tax, and the cigarette tax are all examples of provincial taxes. Regency/City Taxes come in a variety of forms, including the following: Swallow's Nest Tax, Parking Tax, Ground Water Tax, Non-Metal Mineral and Rock Tax, Restaurant Tax, Hotel Tax, Entertainment Tax, Advertisement Tax, Street Lighting Tax, and Tax on Acquisition of Land and/or Building Rights (Asy’ari et al., 2020).

Regional Levies

Payments given by the community to the area for directly received services or for permissions gained are known as regional levies. Regional levies are levied in the region in exchange for specific services or privileges that the regional government offers and/or grants for the benefit of private citizens or corporations. Natoen et al., (2018) state that regional levies under Law Number 28 of 2009 have the following features: 1) they are imposed through the regional government; 2) they may be coercive due to the use of public facilities in the region; 3) there is reversibility based on the amount paid (direct counter-performance); and 4) withdrawals are imposed on people or organizations that have used state services.

Gross Regional Domestic Product (GRDP)

The gross regional domestic product (GRDP) is the total worth of products and services generated in a given area or region over a specific time period, usually one year. The high GRDP score, which indicates a strong rate of economic growth, indicates that the region's economy is expanding. According to the Badan Pusat Statistik (BPS), gross regional domestic product (GRDP) is the total value of final goods and services produced by all economic units in a region, or the amount of added value produced by all business units in a region. The additional value of products and services determined using prices in each year is described by the Gross Regional Domestic Product based on current prices, whereas the Gross Regional Domestic Product based on constant prices (Dama et al., 2016).

Population

The BPS (2015) defines inhabitants as everyone who has lived in a certain location for six months or more, as well as those who have lived there for less time but want to stay. Population growth is not an issue; rather, it is a necessary...
component that can promote economic expansion and development (Nugraheni et al., 2019). The population is growing quickly due to the high rate of population growth in many regions of the world. There are food shortages and poverty in various places of the world. Experts are concerned about this situation and are all trying to determine what causes poverty (Asy'ari et al., 2020).

Effect of Regional Taxes on RGI

The relationship between regional autonomy theory and regional taxes is that regional taxes are one source of a region's initial revenue. Accordingly, one may assume that there is a positive or directly proportionate link between regional taxes and RGI. Stated differently, a region's RGI increases with the level of regional taxation. On the other hand, a region’s RGI decreases with decreasing local taxes in that region. Regional taxes and RGI have an effect on each other; the higher the regional tax, the larger the RGI that will be received, and the lower the regional tax, the lower the RGI, according to research by (Sudarmana & Sudiartha, 2020). According to study Setiyawan (2018), regional taxes have an impact on RGI. Ramadhan's research (2019) concluded that regional taxes have an effect on RGI. According to Usman's research (2020), regional taxes have an impact on RGI. The same is true of the research by Yusmalina et al (2020), where RGI is impacted by regional taxation.

H1: Regional taxes have an effect on RGI

Effect of regional levies on RGI

One RGI element that plays a significant part in implementing regional autonomy to produce regional original revenue is regional levies. Every kind of regional charge may be collected by the region. The goal of community engagement in levy payments is to raise regional levy income. The quantity of local original revenue increases with the amount of regional levy money. Regional genuine income and regional levies are therefore correlated; that is, if regional levy revenue rises, so does regional original income. According to Sudarmana & Sudiartha (2020) regional levies influence RGI, this is in line with Setiyawan (2018) and Ramadhan, (2019) which states that regional levies influence RGI. This research is in contrast to Nugraheni et al (2019) and Usman (2020) which states that regional levies have no effect on RGI.

H2: Regional levies have an effect on RGI

Effect of GRDP on RGI

The relationship between regional autonomy and GRDP is that gross domestic product (GRDP) is the total amount of money earned domestically, including money earned from foreign-owned production factors. It also represents the total amount spent on products and services generated domestically or the market value of all final goods and services produced in the economy over a specific time period. The higher an individual's income, the more they will pay in taxes that
have been set by the government. This is the link between GRDP and Regional Genuine Income (RGI). Based on research results Muhammad (2021), Ariyani et al. (2018) and Hendri Saldi et al. (2021) GRDP has an effect on RGI. In line with research Krisnayanthi & Karmini (2023) which states that every time there is an increase in gross regional domestic product, it will be followed by an increase in regional tax revenues assuming other variables are constant. This is different from research Muslim et al. (2019) which states that GRDP has no significant effect.

H3: GRDP have an effect on RGI

Population moderates regional taxes’ effect on RGI

Population growth has the potential to have an impact on regional tax revenues, this is because increasing the population in an area will increase the number of taxpayers so that the regional taxes received will also increase. So, it can be concluded that population growth can moderate local taxes on RGI revenues. Research results Asy'ari et al. (2020) state that if the population increases, regional taxes will also increase. On the other hand, if the population decreases, local taxes will decrease. If the population increases, tax income from each tax sector post will increase, which will lead to an increase in local taxes in the city of Malang. The increase in regional taxes will also affect the development of adequate infrastructure. In accordance with studies by Sania et al. (2018), Berutu & Kuntadi (2023), Putra & Anis (2021) that demonstrates the impact of population on regional taxes. Yet, study findings Mongdong et al. (2018) indicate that population has no effect on regional taxes.

H4: Population moderates local taxes on RGI

Population moderates regional levies’ effect on RGI

Among the economic actors involved in production, distribution, and consumption is the population. The community enforces the receipt of regional levies, both those derived from market levies and those coming from cars, making the populace the agent in both regional levies and economic activity generally. Regional levies are influenced by population density, which can have an impact on RGI revenue levels. Iman et al., (2019) states that population has an effect on RGI and research conducted by Romiyati et al. (2019), Rahayu & Sudiana (2004) and Tamin & Syafitri (2022) states that population has a positive effect on regional levies. every revenue received by the government in regional expenditure such as paying taxes and regional levies and comply with regulations provided by the government so that revenue will increase regional finances.

H5: Population moderates regional levies on RGI

Population moderates GRDP’s effect on RGI

A population's ability to work will create a workforce, which on the one hand represents the potential mobilized for profitable enterprises—that is, those able to provide goods and services to meet daily necessities. Because a productive
population is one of the production determinants, changes in the population will have an impact on the amount of production. Population growth will boost GRDP, which will have an impact on RGI growth. Population has an impact on GRDP, according to study by Julfiansyah (2013), Omega Liow et al. (2022), Rafik & Pahlevi (2020). Similarly, studies indicate that GRDP is impacted by population (Waidah & Pernanda, 2020).

**H6: Population moderates GRDP to RGI**

### 3. RESEARCH METHOD

This research makes use of a quantitative associative mode of inquiry. Research that uses numerical or numerical-qualitative data is known as quantitative research. Research that attempts to ascertain the impact or relationship between two or more factors is known as associative research. (Sugiyono, 2018). This research method can be seen in Figure 1. Research flow chart.

![Figure 1. Research flow chart](image)

**Data source**

Since 2000, the four districts and four cities that make up West Java Province have been divided into Banten Province. Banten Province has grown extremely quickly up to this point. The original income receipts for the region, which rise annually, demonstrate this. Every region possesses a substantial amount of potential, with Lebak Regency having the ability to produce 3,172.4 tons of fish annually. Because of this, Banten Province is a subject of study.

The data collected is in the form of documents included in the regional statistical center of Banten Province. The data used is panel data consisting of 2017-2021 time series data and a cross-section of 8 areas. The data used in this research is shown in the table below:
Table 2  Variables, Descriptions, and Data Sources in Research

<table>
<thead>
<tr>
<th>Variables</th>
<th>Descriptions, and Data Sources in Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Genuine Income (RGI)</td>
<td>Total RGI is taken from BPS for Banten Province</td>
</tr>
<tr>
<td>Regional Taxes</td>
<td>Regional Tax is taken from BPS of Banten Province</td>
</tr>
<tr>
<td>Regional Levies</td>
<td>Regional Levies are taken from BPS for Banten Province</td>
</tr>
<tr>
<td>Gross Regional Domestic Product (GRDP)</td>
<td>Total GRDP is taken from Regency/City BPS data for Banten Province</td>
</tr>
<tr>
<td>Population</td>
<td>The total population is taken from Regency/Municipal BPS data for Banten Province</td>
</tr>
</tbody>
</table>

Data analysis technique

This research’s data analysis methodology includes both quantitative analysis with the EVIEWS test instrument and descriptive analysis. In order to pick a model, the Chow, Hausman, and LM tests are used. Common effect, fixed effect, and random effect models are tested at this stage. This research also uses the classical assumption test. The classical assumption test is a regression model obtained from the Ordinary Least Squares (OLS) method. If a number of requirements called classical assumptions are met, then these conditions will be realized. These requirements include autocorrelation, homoscedasticity, multicollinearity, and normality tests.

Regression Analysis

This research uses a regression equation through an interaction test known as Moderated Regression Analysis (MRA) to see the effect of Regional Taxes, Regional Levies and GRDP on Regional Original Income with population and inflation as moderating variables. The moderating variable will later be used to find out whether it strengthens or weakens the relationship between the independent and dependent variables. The regression equation used is as follows

\[
Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_1Z_1 + \beta_5X_2Z_1 + \beta_6X_3Z_1 + \epsilon
\]

Information

Y: Regional Genuine Income
\(\alpha\): Constant
\(\beta_1-\beta_9\): Regression coefficient of each factor
X1: Regional Taxes
X2: Regional Levies
X3: GRDP
Z1: Population
\(\epsilon\): Error

Hypothesis testing

A hypothesis is essentially a claim or supposition that could be true. It is frequently utilized as a starting point for additional study or for issue resolution
when making decisions. T-test (The significance test of each individual parameter), the MRA test, and the coefficient of determination (R²) are the tests that are employed.

4. DATA ANALYSIS AND DISCUSSION

Descriptive statistic and correlation matrix

Based on data processing through Eviews 10 software, the minimum, maximum, average, and standard deviation values of each research variable are obtained. This can be seen in Table 2 below:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Median</th>
<th>Maximum</th>
<th>Minimum</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>RGI</td>
<td>1.062989</td>
<td>7.082340</td>
<td>2.725685</td>
<td>1.644376</td>
<td>8.881259</td>
</tr>
<tr>
<td>Regional Taxes</td>
<td>4.301460</td>
<td>4.301460</td>
<td>2.153662</td>
<td>37216263</td>
<td>7.209883</td>
</tr>
<tr>
<td>Regional Levies</td>
<td>55415554</td>
<td>54596067</td>
<td>1.365474</td>
<td>8560073</td>
<td>35486184</td>
</tr>
<tr>
<td>GRDP</td>
<td>1.105564</td>
<td>1.105564</td>
<td>1.365474</td>
<td>8560073</td>
<td>31965124</td>
</tr>
<tr>
<td>Population</td>
<td>1550781.</td>
<td>1376241.</td>
<td>3800787.</td>
<td>425103.0</td>
<td>906349.5</td>
</tr>
</tbody>
</table>

Source: Self Proceed

Based on the results of the descriptive statistical analysis test in Table 3, it shows that the total number of research samples (observations) is 40. This number is the total sample of districts/cities for five years during observations in research from 2017 to 2021 where every year there are 8 regencies / City that became the research sample.

The Regional Taxes variable (X1) has a maximum value of 2,153,661,722 obtained from Tangerang Regency in 2019, a minimum value of 37,216,263 derived from Pandeglang Regency in 2020. Regional Levies variable (X2) has a maximum value of 136,547,373 derived from Serang Regency 2020, the minimum value of 8,560,073 comes from the City of Cilegon in 2018. The GRDP variable (X3) has a maximum value of 110,556,398.12 which comes from the City of Tangerang 2019, the minimum value is 17,866,428.41 which comes from the Regency Lebak in 2017. Population Variable (Z) as a moderating variable has a maximum value of 3,800,787 people from Tangerang Regency in 2019, a minimum value of 425,103 people from Cilegon City 2017. RGI variable (Y) as the dependent variable has a value maximum of 2,872,568,513 coming from Tangerang Regency in 2018, minimum value of 164,437,572 coming from Serang City in 2018.

The research findings will be analyzed using the framework found in Tables 3 through 6.
Goodness of Fit Model

Table 3 Conclusion of Model Selection

<table>
<thead>
<tr>
<th>Type of Model</th>
<th>Comparison Test</th>
<th>Test Result</th>
<th>Selected Models</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chow Test</td>
<td>CEM vs FEM</td>
<td>0.0001</td>
<td>FEM</td>
</tr>
<tr>
<td>Hausman Test</td>
<td>REM vs FEM</td>
<td>0.0040</td>
<td>FEM</td>
</tr>
</tbody>
</table>

Source: Self Proceed

In accordance with the provisions, further tests will not be carried out and it is stated that the fixed effect model is the right model chosen for the panel data regression test.

Coefficient of Determination (Adjusted R2)

To determine the extent to which the independent variable influences the dependent variable, one uses the coefficient of determination. The contribution of the independent variable to the dependent variable and its outcomes.

Table 4 Determination Coefficient Test Results

<table>
<thead>
<tr>
<th></th>
<th>R-squared</th>
<th>Adjusted R-squared</th>
<th>Mean dependent var</th>
<th>S.D. dependent var</th>
<th>Akaike info criterion</th>
<th>Schwarz criterion</th>
<th>Hannan-Quinn criter.</th>
<th>F-statistic</th>
<th>Durbin-Watson stat</th>
<th>Prob(F-statistic)</th>
</tr>
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<tbody>
<tr>
<td>R-squared</td>
<td>0.996002</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td>0.000000</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.994431</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>S.E. of regression</td>
<td>66277316</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>1.229951</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-769.9984</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-statistic</td>
<td>634.0905</td>
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<td></td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>0.00629893</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

Source: Self Proceed

Table 5’s results for the determination test indicate an Adjusted R-Squared value of 0.994431, indicating a 99% magnitude for the coefficient of determination. This demonstrates the 99% explanation rate of the dependent variable (GRI) by the independent variables employed in this study, namely regional taxes, regional levies, and GRDP. Other factors not included by the study model account for the remaining 1% of the explanation.

Partial Test (T Test)

Assuming all other independent variables remain constant, the t statistical test illustrates the extent to which one independent variable influences the dependent variable. The probability value of each variable is examined in this hypothesis test using the subsequent criteria:

1. If the probability value > significance value, the hypothesis is rejected
2. If the probability value < significance value, the hypothesis is accepted.
Table 5 Partial Test Results (T Test)

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Taxes &lt;X1&gt;</td>
<td>0.639564</td>
<td>0.162766</td>
<td>3.929347</td>
<td>0.0005</td>
</tr>
<tr>
<td>Regional Levies &lt;X2&gt;</td>
<td>-1.789611</td>
<td>1.200759</td>
<td>-1.490400</td>
<td>0.1473</td>
</tr>
<tr>
<td>GDRP &lt;X3&gt;</td>
<td>-0.511732</td>
<td>0.655545</td>
<td>-0.780620</td>
<td>0.4416</td>
</tr>
<tr>
<td>Population &lt;Z&gt;</td>
<td>131.1849</td>
<td>117.5061</td>
<td>1.116410</td>
<td>0.2737</td>
</tr>
<tr>
<td>C</td>
<td>4.781551</td>
<td>1.559919</td>
<td>2.996712</td>
<td>0.0057</td>
</tr>
</tbody>
</table>

Source: Self Proceed

Thus, based on the statistical equation of the t test in table 6, it can be concluded:

1. H1 = RGI is significantly impacted by regional taxes. With a probability value of 0.0005, the regional tax variable is less significant than both the coefficient value of 0.639564 and the significance value of 0.05. Thus, it can be concluded that H1 is approved. This indicates that the impact of regional taxes on RGI is thought to be substantial.

2. H2 = Regional Levies significantly impact RGI. The regional Regional Levies variable has a probability value of 0.1473, which is less than the 0.05 significance level and the -1.789611 coefficient value. Thus, it can be concluded that H2 is acceptable. This demonstrates that it is thought that regional Regional Levies variables have a detrimental effect on RGI.

3. H3 = RGI is not significantly impacted by GRDP. With a probability value of 0.4416, the GRDP variable is more likely to occur than both the coefficient value of -0.511732 and the significance value of 0.05. Thus, H3 can be deemed to be rejected. This demonstrates that it is thought that the PDRB variable has no bearing on RGI.

Moderate Regression Analysis (MRA)

The population is the moderating variable considered in this study. The link between regional taxes, regional levies, and GRDP to RGI will be moderated by the population. If the moderating variable has a significance value less than 0.05, it is said to be able to moderate the impact of the independent variable on the dependent variable. The output results demonstrate that the population variable can moderate the regional taxes variable on RGI, with a sig value of 0.0468 < 0.05. The second model regression test is the population variable moderating the independent variable, namely Regional Levies on the dependent variable, namely RGI, MRA test results in table 4 shows a sig value of 0.8977 > 0.05, meaning that the variable population can't afford it moderating the variable Regional Levies on RGI. While the third model regression test is the population variable does not moderate the relationship between GRDP and RGI. From the output results, it can be seen that the sig value is 0.9203 > 0.05, meaning that the population variable is not able to moderate the GRDP variable on RGI.
Table 6 Conclusion Of The Moderation Test

<table>
<thead>
<tr>
<th>No</th>
<th>Model Type</th>
<th>Test Result</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MRA1</td>
<td>0.0468</td>
<td>Moderating</td>
</tr>
<tr>
<td>2</td>
<td>MRA2</td>
<td>0.8977</td>
<td>Not Modating</td>
</tr>
<tr>
<td>3</td>
<td>MRA3</td>
<td>0.9203</td>
<td>Not Modating</td>
</tr>
</tbody>
</table>

Source: Self Proceed

Discussion

The effect of regional taxes on RGI

The results of testing the H₁ hypothesis can be explained that regional taxes have an effect on regional genuine income. So the first hypothesis is accepted. Tests on regional taxes variables show a probability value of 0.0005 which means it is smaller than the significance value of 0.05 and the coefficient value of 0.639564. The results of this study are in accordance with the results of previous research, namely research conducted by (Nugraheni et al., 2019) and (Nurwahidah & Abidin, 2021) which stated that regional taxes affect regional genuine income.

This shows that an increase in regional taxes can provide an increase in the original regional tax revenue of the District/City of Banten Province. And with the results of the test stating that regional taxes have a positive effect on local own-source revenue, it indicates that regional taxes have an important role in increasing local-original revenues. This can be seen from the value of the average regional tax contribution to regional genuine income of 61%.

The effect of regional Regional Levies on RGI

The results of testing the H₂ hypothesis explain that Regional Levies have a significant negative effect on regional genuine income. This can be seen in the results of the t test showing the inflation probability rate of 0.1473 > 0.05 so that the hypothesis H₀ is rejected and H₁ is accepted.

Regional Levies cannot affect local original income, indicating that Regional Levies have less role in Regional Genuine Income. This can be seen from the magnitude of the average contribution of Regional Levies of 8% to regional genuine income, so the government's attention is needed in intensifying the receipt of Regional Levies. The results of this study are in line with research conducted by (Nugraheni et al., 2019) and (Nurwahidah & Abidin, 2021) which state that Regional Levies have no effect on regional genuine income.

The effect of GRDP on RGI

The results of testing the H₃ hypothesis can be explained that GRDP has no effect on RGI. The probability value of the GRDP variable is 0.4416 which is greater than the significance level of 0.05. The results of this study are in accordance with the results of previous research, namely research conducted by (Muslim et al., 2019) which states that GRDP has no significant effect on regional original taxes. In contrast to research conducted by (Muhammad, 2021) and (Krisnayanthi &
Karmini, 2023) which states that GRDP has a positive and significant effect on Regional Genuine Income.

According to the data obtained, the PDRB of the District/City of Banten Province has increased every year, although not with a significant percentage increase. This is due to the large number of investors or entrepreneurs who enter the District/City of Banten Province, but many potential taxes may not be covered so that tax revenue is not maximized, coupled with the large number of taxpayers who are lazy or reluctant to carry out their obligations in paying taxes. When a company gets a lot of profit, there is a reluctance to pay taxes and companies often do earnings management to avoid high taxes. In taxation theory, there are two factors that we know to determine tax effectiveness, namely ability and willingness. So these two things are the cause of the GRDP not being able to affect the original regional income of the District/City of Banten Province.

**The population moderates regional taxes on RGI**

The results of testing the H4 hypothesis can be explained that the population can moderate regional taxes on Regional Genuine Income. The MRA1 moderation probability value is 0.0468, which is less than the significance level of 0.05.

This shows that with an increase in population, the regional taxes received by a region will increase in each tax sector post. With high population growth, the productivity of the community will also be high in producing and absorbing production, which can be interpreted by an increase in population, the level of income will also increase. With the growth of the population will affect the number of taxpayers who pay regional taxes and can increase regional genuine income.

**The population moderates regional Regional Levies on RGI**

The results of testing the H5 hypothesis can be explained that the population does not moderate regional Regional Levies on RGI. The MRA2 moderation probability value is 0.8977, which is greater than the significance level of 0.05. The results of this study are in line with (Angraini & Tai, 2022).

Regional Levies are Regional Levies imposed on payment for services or the granting of certain permits granted by the regional government. Not all residents use the facilities provided by the local government which are included in Regional Levies. Like the use of toll roads, not all residents use toll roads in their daily activities. So this is what causes the population to not be able to moderate regional Regional Levies on RGI.

**The population moderates GRDP to RGI**

The results of testing the H6 hypothesis can be explained that the population does not moderate GRDP to RGI. The MRA3 moderation probability value is 0.9203, which is greater than the significance level of 0.05.

This can be caused by an imbalance between the increase in population and production capabilities such as the availability of food, clothing and shelter. The result of the increasing population is the lack of availability of primary raw
materials for production originating from nature and available living facilities. Apart from that, an increase in population will put more pressure on jobs, resulting in an increase in unemployment and accompanied by problems with increasing food availability. So that the population is not able to moderate GRDP to RGI.

5. CONCLUSION & SUGGESTION

This study examines the effect of regional taxes, Regional Levies, GRDP on RGI with the population as a moderator. The results show that: (1) The regional tax variable affects the original regional income of the District/City of Banten Province; (2) The regional Regional Levies variable has no effect on the Regional Genuine Income of the District/City of Banten Province; (3) The GRDP variable affects the Regional Genuine Income of the District/City of Banten Province; (4) The population variable moderates regional taxes on the district/city revenue of Banten Province; (5) The population variable does not moderate regional Regional Levies on the district/city revenue of Banten Province; (6) The population variable does not moderate the GRDP on the Regional Genuine Income of the District/City of Banten Province.

Judging from the test results obtained, the advice that can be given is that the District/City Government of Banten Province can improve performance in optimizing regional tax revenues and the accuracy of subject and object data, so that tax subjects and objects that have not been registered as taxpayers can be registered as taxpayers. For regional Regional Levies, in this study it shows that the test results cannot affect regional genuine income, for this reason local governments can increase Regional Levies by improving the administration of Regional Levies and providing remuneration directly to strategic businesses that make Regional Levies payments.

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