Factors Affecting Regional Retribution

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Abstract. In the era of regional autonomy, the acceleration of regional economic development depends on the ability of local governments to manage local sources of revenue in independently financing regional expenditures. The variables studied were per capita income, population, regional investment, and regional levies. This study aims to examine the effect of per capita income, population, and regional investment on regional levies. The research population is all autonomous regions within the Jabodetabekjur area (10 autonomous regions) with a sample period of development from 2010-2019 (10 years). The research design uses an explanatory study method that aims to explain and test the hypothesis of a causal relationship between variables. The research model was formulated recursively in the Tiered regression analysis was used to study the Cobb-Douglas linear function of panel data through the EViews 10 application. The results of the analysis show that per capita income, population, and regional investment have a significant effect, either simultaneously or partially by regional levies.

Keywords: per capita income-1; population-2; regional investment-3; regional levies-4

1 Introduction

the emergence of Jakarta as the state capital, has caused a spill-over of urban development to the surrounding areas, resulting in various allocations of functions in cities around Jakarta. Meanwhile, there is no integrated planning in the area around Jakarta, which is based on a unified ecosystem that influences each other. Thus, an understanding is needed to manage together within the framework of inter-regional cooperation that has been determined by the mechanisms and systems by applicable regulations. Inter-regional cooperation is one of the main approaches in Spatial Planning/Region and environmental management which covers more than one administrative area. Cooperation between regions is one of the tools to improve the balance and harmony of development between regions and sectors, as well as play a role in realizing efficient use of space as a place for economic and socio-cultural activities as well as environmental preservation. Inter-regional cooperation is also a tool to maintain inter-regional ecosystems for the preservation of environmental functions and sustainable development. Inter-regional cooperation can be carried out in an effort to resolve cross-border conflicts and/or problems that are difficult to handle on their own, for example in regional infrastructure issues.

Institutionally, Urban Development Cooperation in the Greater Jakarta area is implemented through the Jabodetabekjur Development Cooperation Agency (BKSP), formed at the end of 2006 based on a joint regulation with the Governor of the Special Capital Region of Jakarta,

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Number 3 of 2006, Number 40 of 2006, Governor of West Java, Governor of Banten, Regent of Bogor, Mayor of Bogor, Mayor of Depok, Tangerang Regent, Tangerang Mayor, Bekasi Regent, Bekasi Mayor, and Cianjur Regent Number 32 of 2006, Number 1 of 2006, Number 16 of 2006, Number 12 of 2006, Number 35 of 2006, Number 6 of 2006, Number 11 of 2006, Number 12 of 2006, Number 16 of 2006 concerning Development Cooperation Agency for the Special Capital Region of Jakarta, West Java Province, Banten Province, Bogor Regency, Bogor City, Depok City, Tangerang Regency, Tangerang City, Bekasi Regency, Bekasi City, and Cianjur Regency are all located in the Indonesian province of West Java. The city of South Tangerang, which is located in the province of Tangerang, was founded in the officially separated from Tangerang Regency on October 29, 2008 was subsequently incorporated into the Jabodetabekjur BKSP.

The vision of the Jabodetabekjur BKSP is the realization of a synergy in the development of community welfare in the Jabodetebekjur area through professional facilities. Meanwhile, its missions are: a) Increasing support for the creation of a more synergistic development policy in the Jabodetabekjur area; b) Improving development programs in the Jabodetabekjur area that are in line with the needs of the community; and c) Improving office administration management.

The Jabodetabekjur BKSP aims to realize integration, harmony, harmony and balance in the implementation of Jabodetabekjur development which are interrelated, influence each other, are interdependent and mutually beneficial, which provide benefits to the welfare of the community in accordance with the needs and interests of the region. The scope of the Jabodetabekjur development cooperation includes: a) Spatial planning; b) Settlements, facilities, and infrastructure; c) Water resources, sanitation, and the environment; d) Transportation, transportation, and tourism; e) Agribusiness, cooperatives, and small and medium enterprises; f) Industry, trade, mining, and investment; g) Population, peace, and order; h) Health and education; I Social and labor relations.

In achieving its objectives, the problems that have been faced by the Jabodetabekjur BKSP are: a) the government is not ready to plan and finance programs that are integral between regions; b) There has not been a strong interconnection between regions in terms of city management; c) There is no common perception, interest and shared priority regarding the importance of handling the Jabodetabekjur Area as a National Strategic Area; d) Lack of good coordination between government institutions, local communities and private sectors in the Greater Jakarta area; e) The capacity of human resources in government institutions is not yet ready for coordination and cooperation between regions; f) The equivalence of regional apparatuses in inter-regional cooperation has not been achieved; g) The need to optimize the role of Jabddetabekpunjur BKSP in inter-regional cooperation; h) The need for RTRW & RPJM instruments for the Jabodetabekpunjur Area; i) The need for support from the Special Allocation Fund (DAK) from the APBN to support development cooperation in the Jabodetabekjur area.

As with per capita income and population, inter-regional investment is one of the factors that determine PAD revenue [1]. Investment in the regions is obtained from local government investment and private investment [2]. Local government investment (government investment) is an allocation of local government savings or government saving (excess revenue over routine expenditures). Investment can be treated as an expenditure for capital goods, both in the public and private sectors, in the context of implementing the process of producing goods and services [3]. The greater investment will encourage an increase in the production of goods/services, which in turn will increase local revenue.

In the perspective of the theory of changes in the economic structure and regional economy, the inequality of economic growth between regions in the Jabodetabekjur area is not merely a stand-alone economic development problem, but can be positioned as an output of economic transition in the transformation of the structure of Regional Original Income to achieve fiscal independence. Referring to Chenery's opinion (1979 in Marjanovic, 2015), changes in the structure of local government revenues, as an economic Transition must be defined as the level or condition that must be met in order for income to increase and remain stable in the transformation of the economic process [4]. The theoretical structure that underlies the theoretical line of thinking above is the theory of economic development, as a grand theory; state finance theory, as a middle-range theory; and the theory of per capita income, population, regional investment, regional original income, fiscal independence, and economic growth, as substance/applied theory. In the context of fiscal independence, this dissertation research is a development of previous research which shows that the structure of Regional Original Revenue as the structure of government revenue in financing development is a determinant of high fiscal independence [5] [6] [7].

Heryanti, et al, 2019 in a study between districts/cities in East Java Province; Machfud, et al, 2020 in a study between districts/cities in Aceh Province Anjani, et al, 2013 in a study in West Nusa Tenggara Province; and Sari, et al, 2019 in a study in Ciamis District. Similarly, the development of previous research which shows that fiscal independence as a result of the transformation of the use of resources in development financing is a determinant of high economic growth [8] [9] [10]. Buser, 2011 in a study between high-income OECD (Organization for Economic Co-operation and Development) member countries or High-Income OECD Nations; Aristovnik, 2012 in a study between Eastern European countries (Eastern Europe); Faridi, 2011 in a study in Pakistan; Mubaroq, 2013 in a study between districts in Indonesia; Ani and Dwirandra, 2014 in a study between districts/cities in Bali Province; and Sularso and Restianto, 2011 in a study between districts/cities in Central Java Province. The study of fiscal independence in economic development is increasingly important amidst the weakening of fiscal independence between regions as a result of the multi-sector crisis due to the Covid-19 pandemic that has still occurred since early March 2020 until now.

According to Keynes (in Wirasasmita, 2010), an increase in government spending will encourage an increase in national income [11]. Increasing local revenue from PAD sources, in the transformation of regional revenue structures for the sake of achieving regional economic prosperity, will synergistically encourage the process of changing all economic functions, including fiscal independence as a transformation of resource use. As according to Chenery's theory of structural change (1979 in Marjanovic, 2015), a fundamental change in the economic structure (structural transformation), including the structure of government revenue (which is reflected in the PAD structure), will trigger an increase in production capacity to generate output; Changes in resource consumption, as well as changes in socioeconomic processes [4]. According to Chenery (1979, cited in Marjanovic, 2015), an economic transition must be characterized as a level or condition that is required for increasing and maintaining income and social welfare as a transformation of socio-economic processes [4]. Structural transformation is reflected through changes in overall factor proportions, reallocation of these factors in various proportions, and/or increased productivity or total factor productivity between sectors [4]. The change in the contribution of government revenue from PAD sources indicates a change in the structure of government revenue which has an effect on economic growth [4].

The government's fiscal independence in financing its expenditures has a very important role in development. This is because governments in developing countries act as agents of development, namely how stability, growth, and equity can be achieved [11]. Keynesians emphasize the importance of government policies in avoiding fluctuations in economic activity and creating stability and economic growth[12]. Government spending (G) in the identity of the national income balance The formula Y = C + I + G + (X – M) lends credence to the Keynesian notion of the importance of government involvement in the economy. As can be seen from the equation above, an increase or decrease in government spending will result in an increase or decrease in national revenue.

2 Research Methods

The subjects in this study were autonomous regions within the Jabodetabekjur area. The research population is all autonomous regions within the Jabodetabekjur area, as many as ten (10) autonomous regions: DKI Jakarta Province, Kab. During the development period, Bogor, Bogor City, Depok City, Kab. Tangerang, Tangerang City, South Tangerang City, Kab. Bekasi, Bekasi City, and Cianjur Regency were all involved. The development span 2010–2019 was used to study the sample (10 years). The convenience sampling strategy was adopted since the relevant study data was readily available. Secondary data in the form of panel data (pooled data), which is a blend of cross-sectional and longitudinal data, is used to measure research variables (between regions) and time series (inter-years) obtained from the Directorate General of Budget, Ministry of Finance, Central Statistics Agency (BPS). , Bank Indonesia (BI), and the Jabodetabekjur Development Cooperation Agency (BKSP). An explanatory or hypothesis testing study was used, with the goal of explaining and evaluating hypotheses concerning the relationship between variables. The relationship described is a causal relationship (causation) or influence between variables as modeled in the research paradigm, namely a causal relationship (influence) between the variables of per capita income, population, and regional investment; Regional Original Income from regional taxes, regional levies, and profits of regionally owned enterprises; fiscal independence; and economic growth in the Greater Jakarta area.

The data collection instrument used in this research is a secondary data documentation study. Documentation studies were conducted at the Directorate General of Budget, Jabodetabekjur Development Cooperation Agency, Ministry of Finance, Central Statistics Agency (BPS), Bank Indonesia (BI), and Jabodetabekjur Development Cooperation Agency (BKSP). The computer program eViews 10 for Windows was used to complete the full data processing and analysis process in this investigation.

3 Results and Discussion

3.1 Results

Descriptive statistical analysis, namely the central tendency and data dispersion, for each research variable can be seen in the following description.

Per capita income, overall for 10 regions during the 2010-2019 period, has a value range between 9.01 – 269.07 million rupiah with a 50.06 average and a standard deviation of 51.53 million rupiah and a median value of 30.96 million rupiah. In the 2010-2019 period, DKI Jakarta Province has the largest average income per capita, which is 185.69 million rupiah; while Cianjur Regency has the smallest average income per capita, which is 14.14 million rupiah.

The total population, as a whole, has a value range between 0.96 – 10.56 million people with a standard deviation of 2.55 and an average of 3.36 million people and a median value of 2.38 million people. In the 2010-2019 period, DKI Jakarta Province has the largest average population, which is 10.12 million people; while the city of Bogor has the smallest average population, which is 1.04 million people.

Regional investment, as a whole, has a value range between 356.42 – 117,520.08 billion rupiah with a standard deviation of 15.174.61 and an average of 15,174.61 ,26,873.18 billion rupiah and a median value of 4,178.59 billion rupiah. In the 2010-2019 period, DKI Jakarta Province has the largest average regional investment, which is 86,122.82 billion rupiah; while Cianjur Regency has the smallest average regional investment, which is 1,061.60 billion rupiah.

Regional levies, as a whole, range in value between 18.48 – 1,820.44 billion rupiahs with a standard deviation of 142.56 and an average of 142.56 ,224.17 billion rupiahs and a median value of 77.83 billion rupiahs. In the 2010-2019 period, DKI Jakarta Province has the largest average regional retribution, which is 676.57 billion rupiah; while Cianjur Regency has the smallest average regional retribution, which is 24.19 billion rupiah.

Fiscal independence, as a whole, has a range of values between 7.97 – 82.74 percent with an average of 36.97 and a standard deviation of 17.00 percent and a median value of 36.00 percent. In the 2010-2019 period, DKI Jakarta Province has the largest average fiscal independence, which is 73.97 percent; while Cianjur Regency has the smallest average fiscal independence, which is 12.96 percent.

Table 1. Autocorrelation Test Results of the Influence of Per capita Income, Population, and Regional Investment on Regional Levies

Dependent Variable: Y12
Method: Panel EGLS (Cross-section random effects)
Sample: 2010 2019
Periods included: 10
Cross-sections included: 10
Total panel (balanced) observations: 100
Swamy and Arora estimator of component variances

R-squared	0.584056	Mean dependent var	1.551064
Adjusted R-squared	0.571058	S.D. dependent var	0.453119
S.E. of regression	0.296764	Sum squared resid	8.454630
F-statistic	44.93347	Durbin-Watson stat	**1.422234**
Prob(F-statistic)	0.000000		

Table 2. Regression Equation of the Effect of Per capita Income, Population and Regional Investment on Regional Levies
(Random Effects Model)

Dependent Variable: Y12
Method: Panel EGLS (Cross-section random effects)
Sample: 2010 2019
Periods included: 10
Cross-sections included: 10
Total panel (balanced) observations: 100

Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.124507	0.356527	3.154058	0.0021
X1	**0.389294**	0.152574	2.551515	**0.0123**
X2	**0.665500**	0.162134	4.104639	**0.0001**
X3	**0.148760**	0.063356	2.348017	**0.0209**

	Weighted Statistics		
R-squared	0.584056	Mean dependent var	1.551064
Adjusted R-squared	**0.571058**	S.D. dependent var	0.453119
S.E. of regression	0.296764	Sum squared resid	8.454630
F-statistic	44.93347	Durbin-Watson stat	1.422234
Prob(F-statistic)	**0.000000**		

Table 3. Test Results of Simultaneous Influence of Per capita Income, Total Population, and Regional Investment on Regional Levies

Simultaneous Effect	R^2	*Adjusted* R^2	F_{hitung}	*p-value*
Per capita income, population, and regional investment (X1, X2, X3)	58,4%	57,1%	44,933	0,000*

Table 4. Test Results of Partial Influence of Per capita Income, Total Population, and Regional Investment on Regional Levies

Partial Influence	b_{i2}	t_{hitung}	*p-value*
Income per capita (X1)	0,389	2,552	0,012*
Total Population (X2)	0,666	4,105	0,000*
Regional Investment (X3)	0,149	2,348	0,021*

3.2 Discussion

The results showed that Per capita income, total population, and regional investment all had a strong simultaneous effect on regional levies, as well as a large positive partial effect on regional taxes. These findings show that per capita income, total population, and regional income are all related, investment play a role in generating higher regional levies.

The model's major variables, according to the findings of the investigation, are: Total Population. The dominating variable that has a positive impact on Regional Levies is Total Population (t value of b22 = 4.105). The elasticity (regression coefficient) of the overall population (b22 = 0.666) is also the highest. This demonstrates that the population is the same, most powerful driver in supporting the increase in regional levies. In addition, it also shows that the increase in population results in an increase in regional levies that are greater than the other independent variables. However, the joint influence of Increases in per capita income, population, and regional investment suggest that per capita income, population, and regional investment are all increasing investment together or synergistically has the ability to increase higher regional levies.

Based on the study's findings, this study concludes that the model of the components studied's influence on Regional Charges has a high degree of conformity, as evidenced by the modified value of the coefficient of determination. The results of this modeling, however, bring up prospects for further research into developing a model composed of other undiscovered components that theoretically also have an impact on Regional Levies within the context of different strategies to increase Regional Levies.

The findings of model testing reveal that efforts to enhance regional levies can be achieved by raising per capita income, total population, and regional investment, all of which have been shown to have a favorable affect direction when used together. The applicable development policy is population productivity empowerment, which is aided by the creation of community revenue streams and investment opportunities.

4 Conclusion

The findings revealed that per capita income, total population, and regional investment all had a substantial simultaneous effect on regional levies, as well as a significant positive partial effect on regional taxes from per capita income, total population, and regional investment. These findings show that greater regional taxes are influenced by per capita income, total population, and regional investment.

The findings of model testing reveal that efforts to enhance regional levies can be achieved by raising per capita income, total population, and regional investment, all of which have been shown to have a favorable affect direction when used together. The applicable development policy is population productivity empowerment, which is aided by the creation of community revenue streams and investment opportunities.

References

[1] S. Sukirno, Makro Ekonomi Modern. Jakarta: Raja Grafindo, 2013.

[2] M. . Jhingan, Ekonomi Pembangunan dan Perencanaan. (Terjemahan The Economics of Development and Planning). 2012: PT Raja Grafindo Persada.

[3] N. . Mankiw, Ekonomi Makro. Jakarta: ERLANGGA., 2015.

[4] V. Marjanovic, “Structural Changes and Structural Transformation in a Modern Development Economy,” Econ. Themes, vol. 53, no. 1, 2015.

[5] B. Heryanti, C.D., Wahidahwati, Suryono, “Pengaruh Pendapatan Asli Daerah, Dana Perimbangan dan Pertumbuhan Ekonomi terhadap Kinerja Keuangan Pemerintah Kabupaten/Kota di Provinsi Jawa Timur,” J. Anal. Akunt. dan Perpajak., vol. 3, no. 1, 2019.

[6] N. Machfud, Asnawi, “Pengaruh Pendapatan Asli Daerah, Dana Perimbangan, Data Otonomi Khusus, dan Tingkat Kemiskinan terhadap Tingkat Kemandirian Keuangan Daerah di Kabupaten/Kota Provinsi Aceh.,” J. Manaj. Indones., vol. 5, no. 1, 2020.

[7] L. Anjani, E.S.D.; Akram, A.; Handajani, “Hubungan PAD, Belanja Modal dan Kinerja Keuangan Pemerintah Daerah di Nusa Tenggara Barat,” InFestasi., vol. 11, no. 1, 2016.

[8] W. Buser, “The Impact of Fiscal Decentralization on Economics Performance in High-Income OECD Nations,” 2011.

[9] A. Aristovnik, “Fiscal Decentralization in Eastern Europe: A Twenty-Year Perspective. MPRA Paper.,” Slovenia: University of Ljubljana, Faculty of Administration., 2012.
[10] M. . Faridi, “Contribution of Fiscal Decentralization to Economic Growth: Evidence from Pakistan,” Pakistan J. Soc. Sci., vol. 31, no. 1, 2011.
[11] Y. Wirasasmita, “Makro Ekonomi. Buku Ajar,” Program Doktor Ilmu Ekonomi Universitas Borobudur.
[12] M. Guritno, Teori Ekonomi Makro. Yogyakarta: STIE YPKN, 2013.