

DETERMINANTS OF SUBNATIONAL OWN-SOURCE REVENUE PERFORMANCE: A SIX-CLUSTER ANALYSIS OF EAST JAVA, INDONESIA

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Abstract

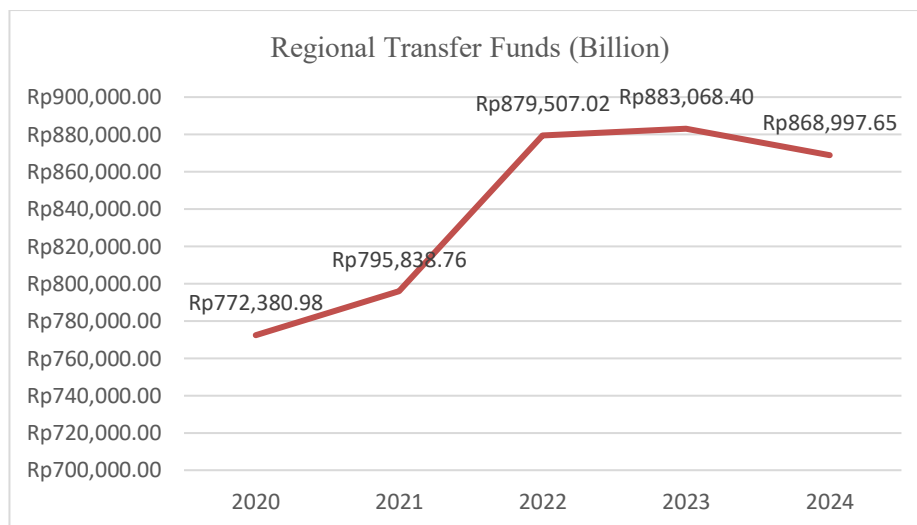
East Java Province shows a high degree of dependency of central government control for fiscal regional autonomy. This paper discusses the attributes of Original Regional Revenue (PAD) across the 38 districts and cities within East Java for the periods 2020–2024. This makes use of a six-cluster geomapping strategy and other relevant economical and cultural methodologies. From a descriptive and statistical approach on BPS & DJPK datasets contrasted with PAD and fiscal spending and welfare variables, the clusters revealed substantial divergence. The Industrial Cluster of Surabaya has the highest PAD and the Madura Cluster is consistently rated lowest. Unlike the other Pandemics, COVID-19 effects were delayed with a substantial drop in 2022, and not in 2020 and 2021. While the pandemic revitalized the industrial areas, it did less for the tourism-dependent areas. Rapid tourism development during the pandemic did not help. PAD growth was also influenced by the development of the South Cross Road. With the shift of focus of the gap in financing the urban and rural areas to the insatiable needs for alternative revenue sources, the self-financing mechanisms that regional autonomy provides for the areas to manage their finances sustainably are being strengthened.

Keywords: Original Regional Revenue, Fiscal Decentralization, Regional Economic Development, East Java Province

INTRODUCTION

Original Regional Revenue (PAD) is the revenue that comes from the autonomous self-managed and self-directed of a region. In this context, Regional potential means the value attributed by regions to development initiatives, expenditure frameworks, or means to reduce dependence on financing from the central government. In a developing economy, an increasing level of PAD. Regions that are economically growing are likely to increase the level of PAD. Economically most lagging regions are economically dependent on central government as it is shown by the level of disproportionate contribution of Transfer Funds to Regions (TKD) to the total revenue and expenditure (APBD) of the regions. This is also true for the economically lagging regions in terms of self-generated revenue (PAD). In such case, the latitude given to the regions to self-manage their finances is, to a large extent, a matter of regulatory compliance and does not suggest an important or positive self-sustaining economic or administrative capacity (Halim, 2018).

Figure 1
Graph of Transfer Funds to Regions 2020-2024



In 2021, national level transfers increased by almost 100 trillion rupiah. Figure 1 shows that the regions still rely heavily on funds from the central government. The increase in transfer funds to regions is partially attributable to the fact that, in order to meet specific central government mandates, regional governments are required to undertake certain activities, such as the construction of specified Physical infrastructures, simply as capital expenditures, and the provision of management and services to populations.

Local governments face polyfunctional challenges in optimizing tax and regional levy collection. Such challenges include tax data being contaminated with procedural and institutional inadequacies and a lack of creativity concerning other revenue streams. Reliance on transfer funds underscores (Kuncoro, 2020; Suparmoko, 2002) these challenges. East Java Province is among the provinces with the highest GDP contribution of 25.23% on Java Island. The ratio of PAD to RR (Regional Revenue) in East Java is approximately 30 to 34 percent, while the ratio of PAD to Transfers to Regions is 48 - 60 %. This indicates that 48 to 60 % of local governments receive funds from the central government. This study

examines the features of Regency and City PAD in East Java from 2020 to 2024, where local governments are heavily dependent on funds from the central government, and attempts to cluster the features.

REVIEW OF LITERATURE

Fiscal federalism is the term used to describe the intersection of various levels of government and their financial relations. More powerful governments can design fiscal and financial policies from the top down. This is similar to the way the central government distributes funds to subnational or local governments. According to Musgrave (1997), It is the government's responsibility to ensure economic stability and then allocate economic resources to the community. Fiscal federalism suggests that economic development may be stimulated by decentralizing financial control to the regions, assuming some degree of regional self-governance. Regional government, in (Zhang and Zou, 1998), is in a better position than central government to optimize the use of scarce resources, because of their greater knowledge of the characteristic and needs of the community.

Public policy Theory, in relation to the government's management of its activities, needs to reflect the exigencies of the people, whether in the area of public goods or public services. These needs are instrumental to the improvement of the quality of life, its physical aspects and the well-being of the people. Public policy can be designed at different levels, be it national, regional, or local. Public policies may appear in the form of statutes, presidential decrees, government regulations, and local government or provincial government ordinances. Public policy is multidisciplinary, cutting across the different spheres of life including, aspects of the economy, politics, the social, and the culture of the people (Iriawan, 2024).

According to Law Number 1 of 2022 and the definition of Original Regional Revenue (PAD), the region's revenue comes from various streams which include: local taxes, local retributions, income from the management of separated regional assets, and other revenues which lawfully and legally recognized and permitted. Out of these four streams, local taxes and local levies are the primary ones. PAD is classified in four streams: Regional tax, Regional Retribution, income from the management of separated regional assets, and other Original Regional Revenue surpluses.

RESEARCH METHOD

This research was conducted in East Java province covering 38 districts and cities. The research used 2020-2024 secondary data, collected from Central Bureau of Statistics, Directorate General of Fiscal Balance at the Ministry of Finance, and publications from the relevant institution, policy documents, and other publications. The study used the variables Regional original income (PAD), Capital Expenditure, Goods and Services Expenditure, (GRDP) per capita, HDI (human development index), and TPAK (percentage of workforce). Descriptive statistical and correlatiaon analysis was used in the study.

RESULTS AND DISCUSSION

Positive financial outcomes for a given region are intertwined with the macroeconomic conditions and the overall welfare of citizens within the region. Analysing the spending patterns of various regions on public services and juxtaposing them with key

economic indicators such as average income, development status, and employment levels within the region is highly instructive.

Table 1
Descriptive Analysis of Fiscal Expenditure and Welfare Indicators

Year	PAD (M)	Capital Expenditure (M)	Goods and Services Expenditure (M)	GRDP per Capita (Thousand)	HDI (Index)	TPAK (%)
2020	561.94	349.45	629.29	42550.26	71.86	70.62
2021	546.51	353.86	707.93	43953.48	72.22	70.38
2022	577.49	431.08	804.23	46260.17	74.05	71.28
2023	648.24	401.57	791.10	48554.14	74.68	73.16
2024	687.40	416.33	849.60	50944.64	75.31	73.67

Source : (Data processed 2026)

Table 1 illustrates the average PAD for East Java from 2020 to 2024, showing an average decrease of 2.75% to Rp 546.51 billion, continuing the trend from 2020, largely due to the impacts of the pandemic. In 2024, however, the PAD improved considerably, reaching Rp 687.40 billion, marking an overall increase of 22.33% from the 2020 to 2024 period. This significant increase aids in validating the findings of (Mardiasmo, 2018), who noted that improvements to local tax revenue, following the 2022 Financial Relations Between the Central and Regional Governments (HKPD) Law, were due to a broadening of the tax base, simplification of the tax structure, and increased marginal tax rates for certain taxes. Additionally, significant improvements in tax administration by the East Java Authorities through the digitization of tax systems contributed to the increase. The tax compliance rate achieved the tax authorities' target, and was a result of the introduction of online tax payment systems (Ministry of Finance, 2024).

The V-shaped recovery trend for PAD in East Java is characteristic of post-crisis fiscal behaviors. The economy contracted in 2021, followed by sustained growth, surpassing pre-pandemic levels by 2024. There appears to be a genuine pattern of correspondence with the endogenous growth theory which states institutional changes and the application of new technology such as the HKPD Law and digital tax systems, brings about positive impacts improving the efficiency of tax revenue collection and other benefits. An increase of 22.33% over a period of five years translates to an average annual growth of approximately 4.12%. This percentage is greater than the average inflation rate for the period in Indonesia which was 3.2% according to the Bank Indonesia. This indicates real growth in the financial capacity of the region as opposed to mere changes in figures. The aggregate values, however, mask the significant disparities that exist across the 38 regencies and cities. Analyzing growth rate by cluster reveals that the Industrial Cluster drove a greater share of the province's average growth. Some cities within this cluster registered growth rates exceeding 30%, whereas the Madura Cluster was constrained to growth rates below 15%. This indicates widening disparities in financial capacity among regions. This particular disparity is concerning and raises fundamental questions about equitable development and the extent to which increasing the financial authority of local government is likely to exacerbate regional

disparities rather than alleviating them, which has been the focus of research in fiscal federalism by (Oates, 1972).

The 2.75% economic growth decline in 2021 warrants further analysis as it is a typical of most of Indonesia, where the regional revenue continued to grow, albeit at a slower rate, during the pandemic. There are reduction in the growth East Java for a number of reasons. For example, the taxation structures in the province are reliant for a large part on taxes from service industries, in particular, the hospitality sector, which are especially prevalent in tourist locales such as Batu City and Banjuwangi, both of which were impacted by the the travel restrictions. Another possible reason is that certain (particularly) underserved areas were slow to implement a digital taxation and as such, they missed the benefits of the tax- and technology- more advanced systems. Third, the regional tax administration took a hit from the PMK No. 17 of/2020, where the revenue sharing arrangements were modified, thus, temporarily reducing the taxable jurisdictions on the local level. All these factors merit further examination to assess the reason for the economic decline in 2021.

Showed growth from 349 to 430 billion Rupiah is the quantifiable estimate on the amount of money East Java spends on large-scale purchases. In the periods of 2020, 2021, and 2024, reductions and increases were observed on the spending on capital expenditures. In addition, average expenditure on the purchase of goods and services has also fluctuated in the period of 600 billion to 850 billion Rupiah. The spending patterns in the listed periods demonstrate the spending shifts of different regions as the economy recovers from the impact of the pandemic. With the above in mind, the economic actors, as the stakeholders, ought to adhere to the stakeholder theory and emphasize the need for effective public governance in the provision of the spending proposals. It is important that these economic actors devise and rationally propose the areas in which public expenditure shall be made, and the extent of which these expenditures shall be made, in order to establish a balance between the continuous provision of public services and the enhancement of capital projects in order to foster a positive impact on the economy in the foreseeable future. The observed reduction in the capital projects expenditure in 2023 is as a direct consequence of the societal and economic challenges presented by the COVID-19 pandemic and the associated need to make adequate preparatory arrangements for the 2024 elections. Excessive consumption may detract from more productive investments and may reduce the efficiency of regional spending (Lewis, 2023).

There is little to be positive about regarding the breakdown of spending in Table 1 in relation to future finances and budget flexibility in the breakdown of spending in Table 1. The spending ratio on capital vsgoods and services decreased from 0.56 to 0.49 from 2020 to 2024. The shift in focus was from development capital operational expenses. This contradicts the most vital principles financial development theories advocate centered on the notion of capital accumulation as the most effective way to increase productivity in the long run. Barro (1990) outlines the strong positive relationship public spending on productive economically (specifically public investment in the roads and etc) has on the private sector income and tax revenue.

The increase in capital spending in 2022 (Rp 431.08 billion) and the big drop in 2023 (Rp 401.57 billion) shows the impact of politics on the allocation of resources in spending

during an election year. Local governments initiate substantial development activities immediately before an election to demonstrate their successes to the electorate. Subsequently, they reduce spending on such activities and reallocate the resources to direct, non-discretionary assistance to the people to prepare for and during the election. This phenomenon is referred to as “political budget cycles” in public finance. The drop in capital spending in 2023, coinciding with the commencement of activities for the 2024 regional elections, exemplifies this phenomenon.

Operational costs are proving even more problematic, as costs of purchases have significantly increased from Rp 629.29 billion in 2020, to Rp 849.6 billion in 2024. This indicates a staggering 35% increase. This shows that expenses are increasing, in turn making adjustments to spending plans tougher for government. This operating cost growth rate significantly exceeds both PAD growth and capital expenditure growth (22.33% and 19.1%, respectively). Meaning that a bulk of this increased revenue is being allocated to cover operational costs, rather than developing project costs.

There are serious concerns about the longer-term sustainability of fiscal matters. East Java’s regions are likely to slip into a “low-investment trap” if goods and services spending continues to accelerate, and spending on capital remains the same. Insufficient infrastructure, as a consequence of under-investment, regional economic growth stagnates. Growth stagnation, in turn, constrains the local revenue (PAD) growth, heightening financial stress and resulting in under-funding of capital projects. To break this unfortunate cycle, there is a need for reform of institutional rules on expenditure control. For example, medium-term expenditure frameworks (MTEFs) that mandate a certain and defined percentage of capital allocations toward long-term growth projects, or systems of budget allocations that are tied to the achievement of specific operational outputs (result-based budgeting).

Meanwhile, there was an increase in per capita GRDP of regencies and cities in East Java. The per capita GRDP recorded an increase of 19.7% from 2020-2024. The cause was an annual increase in the minimum wage set by the local governments which was followed by an increase in the cost of living in all regions. Bank Indonesia (2022) states that East Java's GRDP growth was driven by three sectoral contributions, namely: manufacturing, trade, and agriculture. These three sectors absorb more than 60% of the province's workforce. This corresponds to the increase in East Java's TPAK which, from 2020 to 2024, increased by 2.54 percentage points.

In this case, counting the 19.7% growth in GRDP per capita as a success translates to an average annual growth of about 3.7%. For context, from year to year, Indonesia, on average, grew 3.2% as a nation. However, in regards to this growth being attributed to the rising minimum wages and the effects of inflation, such claims are anecdotal at best. It is true that this phenomenon has the potential to increase GRDP on a nominal level. However, this does not equate to a true increase in productivity and standards of living, especially in an inflationary economy. Given that within the inflationary economy the delta GDP is a manageable loss, it may be overly optimistic to say that the true GRDP per capita is growing at an annual rate of 2.8% to 3.0%. Even if that is the case, the situation is self-evidently positive, which many may appear as a surprise uninformed about the rate of inflation. The different sectors with more potential for contribution to growth require efforts to analyze more deeply. East Java’s key sectors: manufacturing, trade, and farming, have more than

60% of job creation which indicates how the economy is structured, but also potential weaknesses. Manufacturing is important for the economy, but is facing even more challenges now. Countries with smaller wages and better automation are also changing how products are made. The agricultural sector, especially in areas like Madura and Tapal Kuda, is characterized by underperformance, low added value, and as a result, potential for income growth and further expansion of PAD via agricultural tax and associated economic activities is limited.

Table 2
Variable Correlation Analysis

Variables	PAD	Capital Expenditure	Goods and Services Expenditure	GRDP per Capita	HDI	TPAK
PAD	1					
Capital Expenditure	0.681	1				
Goods and Services Expenditure	0.970	0.704	1			
GRDP per Capita	0.368	0.187	0.358	1		
HDI	0.387	0.065	0.357	0.512	1	
TPAK	-0.250	-0.091	-0.234	-0.292	-0.503	1

Source: Data processed (2026)

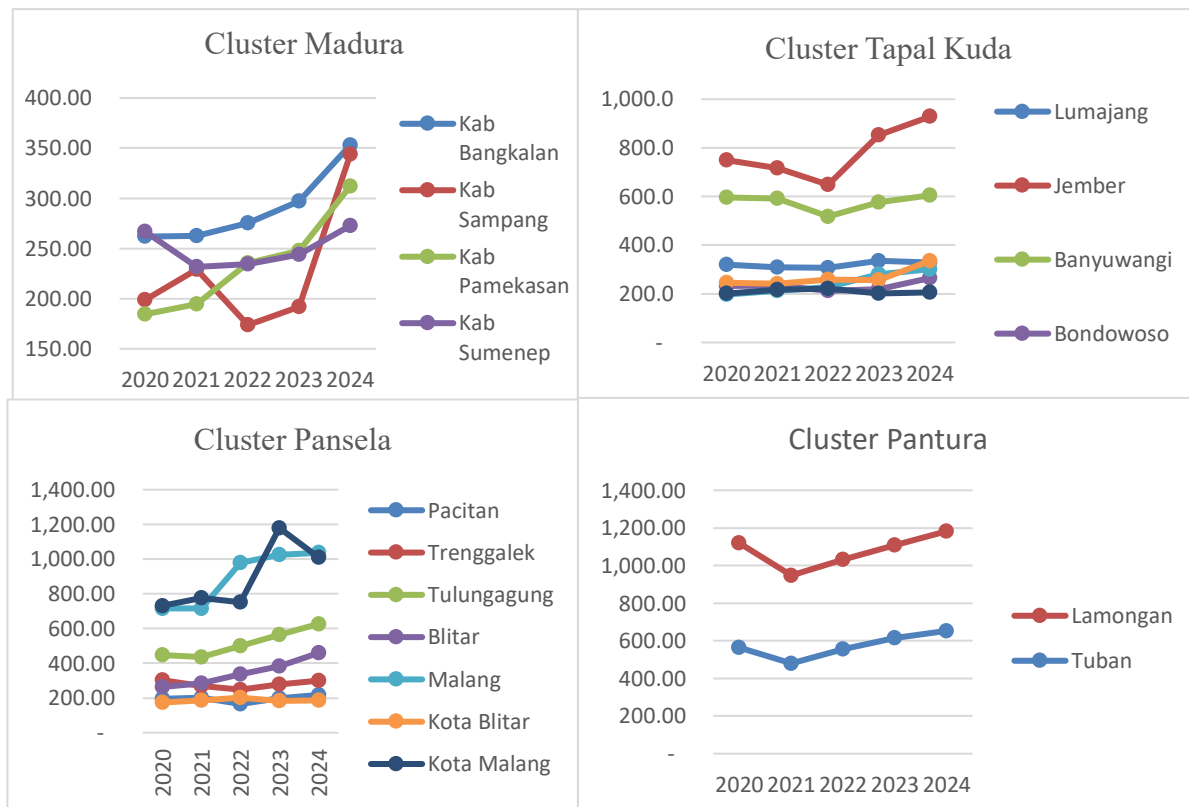
TPAK has gone up from 70.62% in 2020 to 73.67% in 2024 (Table 1). That’s an improvement of 2.54%. That shows that the economy has improved enough to absorb more workers and that people post pandemic aren’t giving up as much. But there are still major differences by gender and geography. BPS 2024 shows that there are still more men than women in East Java. Rural-urban divides in employment are still 8% or higher in certain locations. Job quantity should be matched by job quality. If more people are entering the workforce through informal or low paying jobs, as it seems, it won’t contribute much to PAD growth (as shown in Table 2), as people in informal jobs don’t pay much local taxes. TPAK shows negative correlations with all variables. Workers with low levels of education and skills dominate the high rates of labour force participation (high TPAK). This is different from the Solow (1956) growth theory, which posits that long-run economic growth is a function of the stock of capital, labor, and technological advancement. Such workers increase the quantity of labour but decrease the quality of work. Thus, their contribution to the formal sector and to the PAD is likely to be low.

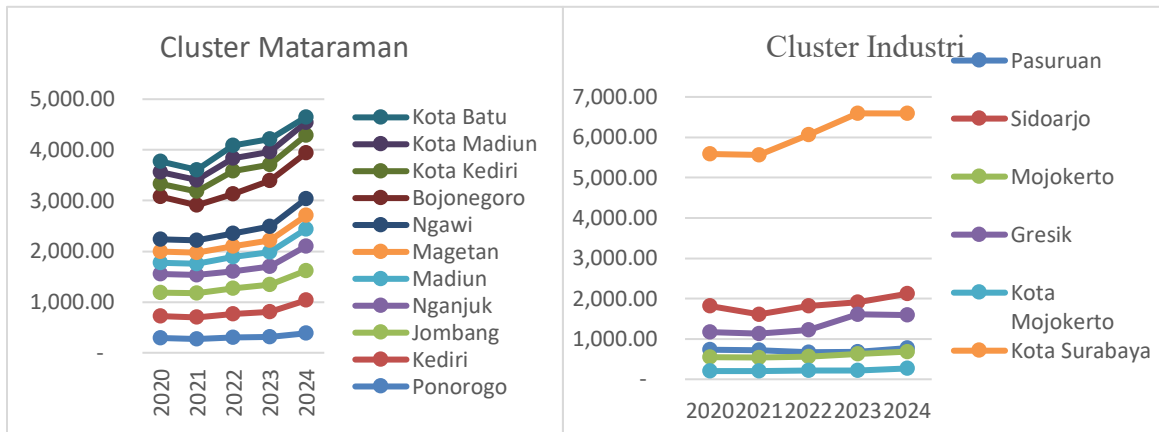
There are different ways to measure the relationship between GRDP growth, TPAK expansion, and PAD improvement. These are as follows. The first and most straightforward relationship occurs after wage increases. Workers who earn more are subject to higher taxes. The second relationship occurs when businesses expand. From this moment on, they will be liable to pay business taxes as well as fees for public services. The third relationship is the most complex and it occurs after the creation of new job opportunities. The community employed gets to spend more money and as a result they pay more in taxes. These taxes will come from public facilities, hotels, restaurants, and entertainment services. The last and most important relationship occurs when there is a combination of all the aforementioned factors.

In such a situation, more and more people will be able to pay more taxes on additional revenues from new business investments and empirical data will be able to justify more licenses for constructions to be granted. In different aggregates, PAD responds to changes in GRDP, and this occurs as a result of the structure of the economy, the format of the tax system in use, the level of tax collection, and the proportion of the economy that operates within informal channels. There are very few studies of this type, and those that do exist rarely employ the use of panel data to measure the effect of economic growth on revenues in different regions.

The Human Development Index (HDI) for East Java has made significant progress as it rose from 71.86 in 2020 to 75.31 in 2024, for an average increase of 2.82 points in five years. This exceeds the target of the East Java Regional Medium-Term Development Plan for 2019-2024, which projected an HDI of 73.58 at the end of the period. This increase shows that there has been substantial improvement in the education sector. Figure 2 shows the development of Regional Original Revenue in East Java Province for the period 2020-2024 by cluster. According to the Ministry of Finance (2018), East Java Province can be clustered into six regions based on geography, economy, and culture: Madura, Tapal Kudal, Pansela, Pantura, Matraman, and Industry.

Figure 2
PAD development per cluster in East Java from 2020 to 2024





From 2020 to 2024 the change in Local Revenue (PAD) across the 38 districts and cities in East Java was different in each case. Most notably, the largest drop in PAD occurred in 2022 and not in the early stages of the pandemic in 2020 or 2021. This was a result of the PPKM (Covid) policies, with the economic consequences of these policies being felt later on due to a lag in tax collection, revenue sharing arrangements between the central and regional governments, and other factors. From 2022, most regions started a recovery trend and increased their PAD until 2024, albeit at different rates across regions. The situation where the biggest drop in fiscal space happened in 2022, not during the early part of the pandemic in 2020-2021, shows an important point that goes against usual ideas about how crises spread. This lagging effect happens because of several connected paths that work with delays over time.

Economic activities and actual monetary reception from taxation are separated by time owing to the tax payment process. Many local taxes, more so those that are assessed annually such as property taxes and certain business licenses, are premised on preceding year's economic performance. Thus, in 2020, the economic slowdown mainly affect tax revenue in 2021, while the continued sluggish performance in 2021 became evident in tax collection for 2022. Local governments often permitted people to postpone payments and offered tax relief during the most severe periods of the 2020 and 2021 crises. For a while, this obscured the real effect on revenue, but it shifted the financial burden to subsequent years. Changes in the PMK No. 17/2020 revisions to the central and local government financial transfer systems affected the systems in various ways. For instance, the rule describes how joint revenue sharing and tax distribution (money sharing) between government tiers is operationalized. Even though it was proposed in 2020, the local budget and operational alterations became evident in 2022 after the specific administrative adjustments and local data comparisons were completed.

Economic shocks affect most people the same way. After the revenue drops in 2020-2021, many businesses used their savings, delayed spending on new projects, and postponed operational shut down in hopes that things would return to normal in the short term. Once the recovery took even longer, the mounting losses began to close down businesses, reduce the workforce, and shift people from formal to informal employment in 2022. This had more serious implications for the tax base. This corresponds to the "postponement hypothesis" in

the study of business cycles, which argues that economic agents take an adjustment to shocks that take sufficient to perceive the temporary or permanent nature of the situation.

Lastly, the different enforcement time periods regarding the start of PPKM in East Java. From the 3rd to 4th quarters of 2021, PPKM experienced the most stringent changes due to the Delta variant, which affected the entire country. As a result of the restrictions, the 2022 financial outcomes reflected a significant downturn in the tourism, hospitality, and retail sectors. Regions with a significant tourism dependency, such as Banyuwangi and Batu, experienced a considerable downturn in 2022. This was due to the fact that several hotels and restaurants that remained open during the early 2020 restrictions, finally closed their doors after sustaining losses during the Delta Wave of 2021.

This delay creates large problems when trying to predict government finances and prepare for emergencies. This means that recovering from a crisis is taking longer than what is usually planned from budgeting from year to year. This also means that financial aid dealing with problems that arise after a crisis is needed to be extended beyond the immediate aftermath of the crisis. Furthermore, this illustrates the need to construct frameworks that provide the ability to assess financial flows instantly, so that gaps in revenue can be detected prior to the issuance of the annual report, in order for policies to be adjusted in a timely manner instead of retroactively. Economically, East Java is divided into six clusters, each of which is characterized by a different level of economic development. The Industrial Cluster, with the Surabaya PAD leading the Cluster, has a significantly higher than average PAD, demonstrating its economic strength as a business and services center. At the same time, the Madura Cluster is lagging far behind, even though the quality of its human development (HDI) is not considered low. This is the case, given that Madura's economy is largely still pre-dominantly traditional subsistence agriculture, a large impoverished population, and many informal economic activities that fall outside of the tax net and, therefore, do not contribute to the PAD. Madura's paradox demonstrates that while provincial HDI levels are fairly similar, most regions reporting lower PAD than Madura are considered economically similar. This begs the question of why the economic human growth resource relationship is so weak. It contradicts the widely held belief that improving human capital always leads to higher economic growth and tax revenue.

Several of these disconnect problems have structural causes. Farming and smallholder subsistence still constitute quite a lot of Madura's local economy, contributing at least 30 to 40 percent to the local GDP. These activities have very low productivity, the output is low and largely unsold, and the production is tied very little to larger organized markets. Farming families that mainly grow food for their own consumption generate little taxable income. Even selling their crops for money, the transactions are very often informal and evading taxes somehow. This is very different from the Industrial Cluster, where factories and service companies are producing, record keeping, and selling which are taxable under different rules. Madura has very high and severe poverty level, the worst in East Java and that level of poverty very much reduces the spending capacity of people on hotels, restaurants, and entertainment which are usually taxable. Poor people spend their small income on basic necessities and not on taxable consumption. Also, poor people are less likely to own homes, and when they do, their homes are worth less, meaning they pay less property tax.

There are still cases where tax revenue can take time to be fully captured due to the low levels of administrative efficiency. In the Madura kabupaten, many regions find it difficult to maintain up-to-date records of taxpayers, assess the value of properties on a regular basis, and collect tax dues from the people. It may be the case, as the interviews from the field research point out, that there is a shortage of personnel, the IT systems are inadequate, and the training on contemporary tax administration is insufficient. The primary challenge that needs to be addressed is how to increase the amount of government revenue without negatively impacting the informal economy which is a vital source of income for a considerable amount of impoverished individuals. If the regulations concerning the informal economy become too strict and aggressive, this could potentially drive informal small-scale businesses further into the margins and, as a result, the economy would become worse off. To tackle this problem, the government could consider the following options: providing support and guidance to large informal sector businesses to facilitate their transition into the formal economy; simplifying tax regulations for micro businesses; gradually enhancing digital payment mechanisms to ensure that all transactions are recorded for tax administration purposes; and increasing employment opportunities within the formal economy to encourage a voluntary movement of people from the informal to the formal sector.

The pandemic affected different economies in different ways. Sidoarjo, Gresik, and Pasuruan are industrial areas that remained steady during the pandemic because the manufacturing sector was still operational and able to meet the logistics demands. Meanwhile, areas that rely heavily on tourism, such as Banyuwangi, Jember, and Batu City, experienced a major downturn during the implementation of PPKM. The tourism sector, however, remained very strong. It experienced a rapid recovery during the reopening of economies and even increased significantly in 2024. Investing in transport infrastructure has been demonstrated to improve the rate of income growth within the affected local economies. The recent opening of the Southern Cross Road (JLS) has enabled the Tulungagung and Blitar regencies to increase their economic earnings by facilitating a more direct access to previously inaccessible areas of economic activity and to popular coastal tourism areas. In contrast, Lamongan District has shown great financial ingenuity by earning income from a diversified combination of healthcare and fishing. This has enabled them to have a PAD greater than that of Tuban District, which is more heavily populated by large scale industrial activities.

Mataraman area, the city vs countryside divide is becoming increasingly pronounced; cities such as Batu, Madiun, and Kediri win the majority of local tax revenue from surrounding regions because they have multiple sources of local tax revenue, such as taxes from hotels, restaurants, and services related to property and offices, all of which are located in the city. At the same time, the districts are in an economically dependent situation on the central government because of their weaker economies. This disparity is not just an economic division, but also a division in the economic creative problem-solving abilities of government officials.

CONCLUSION

Based on the research result, PAD (Original Regional Revenues) in 38 regencies and city of East Java for the period of 2020 - 2024, and has found three points of interest which are important for the regional fiscal policy and regional development planning. First,

disparity in the management of revenues and expenditures across regions are, to a large extent, caused by the disparity in the level of development. In all measures, the Madura Cluster was the worst even when compared to other regions with similar level of economic development. This result points to the fact that there is a high degree of unders governance and fiscal imbalance in that region. The extent to which people are employed in the formal as opposed to the informal sector also seems to explain the level of disparity in the revenues that are collected. Secondly, with respect to the economic impacts of COVID-19, there was a delay in the impact that the disease had on the regional revenues, with the most impact being felt in 2022 rather than in the immediate period of 2020 - 2021. This delay was due a number of factors such as tax evasion, a regional revenue sharing and the COVID-19 impact on the government intergovernmental fund transfer, and a shift in the revenue collection patterns for various regions. Lastly, infrastructure development, such as the South Cross Road project, is important for improving market access and the diversity of economic activities, and is also important for increasing the Original Regional Revenues (PAD). The findings confirm that the development of regional tax revenues is predicated on the relationship of improved governance as well as the investments in infrastructure. The rural-urban financial disparity continues to demonstrate the extent to which economic activities are spatially concentrated.

The findings point to key policy focus areas: formulating diversified economic approaches for areas with concentrated industrial dependencies; productive investments in lagging areas, especially in Pacitan, Trenggalek, and Madura; fiscal consolidation, improved tax collection, and digitization; and differentiated policies, taking into account context and different regional capabilities, opposed to a more blanket approach.

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