It takes two to *Tango*: The joint effect of democracy and fiscal capacity on economic growth in Indonesia

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Abstract

The literature continues to debate the effects of democracy and fiscal capacity on economic growth, both partially and jointly. To remedy the literature puzzle, this study examines the economic growth effects of democracy and fiscal capacity in 34 Indonesian provinces from 2016 to 2021. Using a fixed-effect model, this study documents no evidence of a partial effect; rather, it finds a joint effect of democracy and fiscal capacity on Indonesian economic growth. These findings remain relatively robust even when provincial heterogeneity, COVID-19 pandemic shocks, and sectoral composition are factored into the model. This finding indicates that regions with democracy and strong fiscal capacity possess relatively fast per capita GRDP growth. Based on these findings, the study concludes that democracy and fiscal capacity should exist side by side. Indonesia's sub-national economic growth strategy, like a *tango* game, requires reforming two types of decentralization: political decentralization to improve the quality of democracy that upholds the merit system and fiscal decentralization to expand local tax capacity to finance public goods productively.

Keywords: *Democracy, Economic growth, Fiscal capacity, Joint effect*

JEL Classification: D72, H71, 043

INTRODUCTION

Many previous studies exert that variations in democracy or fiscal capacity separately influence a country's economic growth. Democracy impacts economic growth because it is linked to the game rules that govern all aspects of life, including the economy (Acemoglu et al., 2019; Knutsen, 2012; Colagrossi et al., 2020). For example, freedom to innovate, adopt technology, and intellectual property protection that promotes interaction among economic actors is more prevalent in democratic countries than in autocratic countries (Abeberese et al., 2021; Wang et al., 2021; Nazarov & Obydenkova, 2020). Likewise, fiscal capacity generates economic activity because it reflects how much the government's ability to collect taxes is used to finance public goods (Johnson & Koyama, 2017; Dincecco & Katz, 2016; Acemoglu et al., 2015). Increased fiscal capacity can lead to a more outstanding provision of public goods in a productive way, which can boost economic activity (Besley & Persson, 2013).

However, scholars are divided on the direct impact of democracy and fiscal capacity on economic growth. Democracy and fiscal capacity have a country-specific effect on economic growth. Democracy's impact on economic growth depends on fiscal capacity and vice versa. In this regard, the interaction effect of democracy and fiscal capacity can be classified into two categories.

Initially, democracy and fiscal capacity are complementarity-relationship. This line of thought is based on the argument that economic policies implemented by democratically elected politicians are only effective if the country has a strong fiscal capacity. Politicians in democratic countries with limited fiscal capacity often pursue myopic economic policies to appease voters or constituents (Stankov, 2018; Feldmann & Popa, 2022). The net result of these conditions is a trap of low-income growth and economic uncertainty (Saint-Paul et al., 2021). Examples include democratically elected governments in several Latin American countries that adopted fiscal populism, such as Chile from 1970 to 1973, Peru from 1985 to 1990, and Argentina from 2003 to 2015 (Dornbusch & Edwards, 1990; Edwards, 2019; Devinney & Hartwell, 2020). A similar phenomenon occurred in the recent crises in Sri Lanka (Abeysinghe, 2021) and Turkey (Orhangazi & Yeldan, 2021).

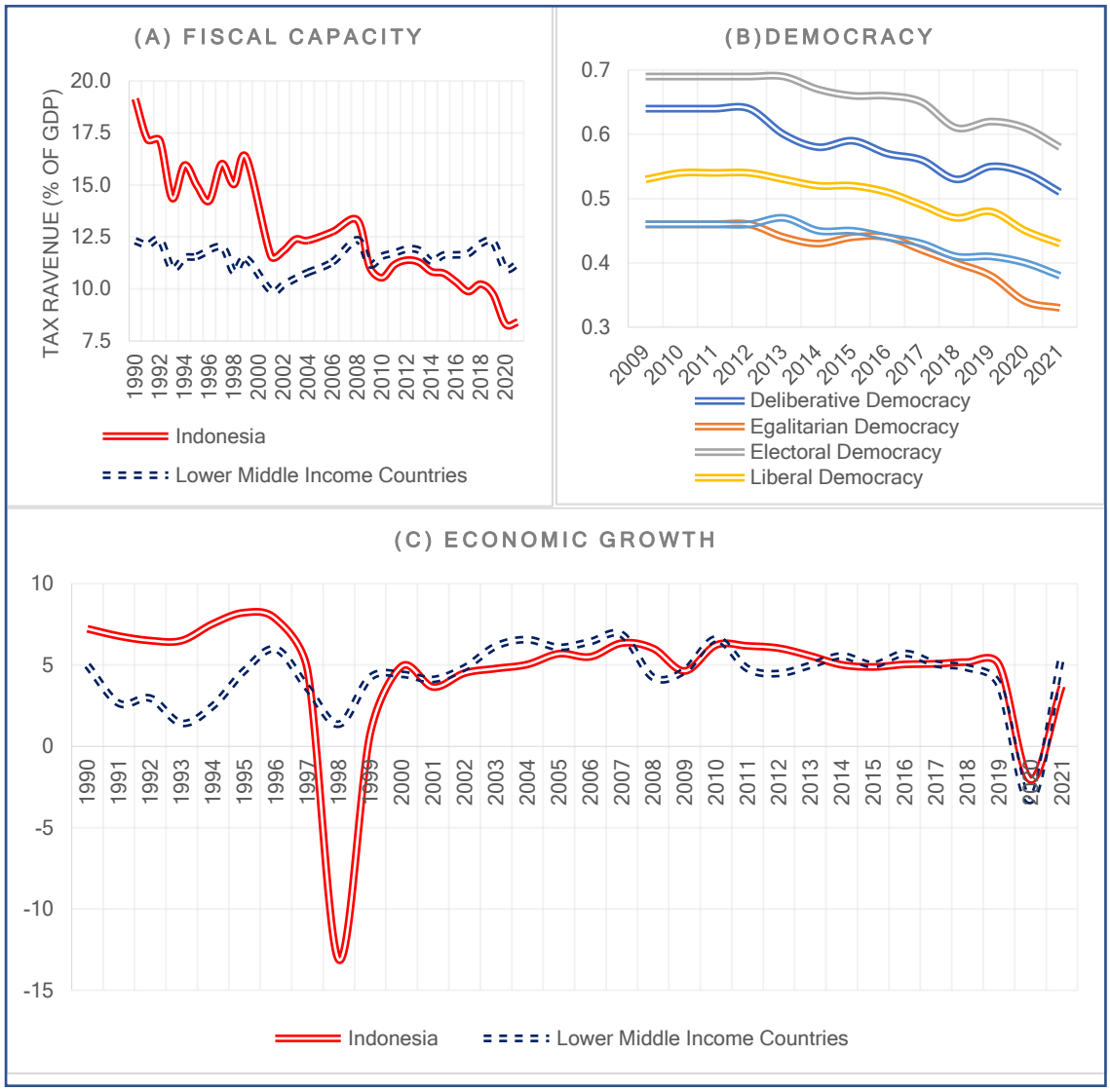
Conversely, democracy and fiscal capacity are substitutability-relationship. This school of thought contends that democracy stimulates economic activity despite a country's limited fiscal capacity. Democratically elected politicians owe it to their constituents to ensure that each program is carried out effectively and efficiently within the constraints of a limited budget (Hanson, 2015). In other words, predatory rulers can be avoided because the check and balance mechanism has been well institutionalized in a democratic environment. Knutsen (2013) demonstrates that Sub-Saharan African countries with weak state (fiscal) capacity, such as Botswana and Mauritius, have witnessed remarkable economic growth since implementing their democratic systems.

In light of previous studies that produced inconclusive results, this study investigates whether democracy and fiscal capacity affect economic growth separately. If not, does their interaction, whether complementary or substitutable, impact economic growth? In looking at the interaction between democracy and fiscal capacity on economic growth, this research differs from previous studies, which mainly focused on the country level (see Bäck & Hadenius, 2008; Knutsen, 2013; Hanson, 2015; Murshed et al., 2022). This study exploits a novel dataset at the sub-national to accommodate the heterogeneity of interregional democracy and fiscal capacity in Indonesia's economic growth context. We employ a sub-national dataset based on the same assumptions as Acemoglu et al. (2015). Compared to Colombia, which Acemoglu et al. (2015) studied, Indonesia has a greater number of provinces and a wider geographical coverage with diverse socio-political backgrounds.

Because of the three stylized facts, this paper explicitly uses the Indonesian setting as a case study to answer the puzzles in the literature and achieve the research objectives. First, Indonesia's fiscal capacity, as measured by the ratio of tax revenue to GDP, has declined since 2009, with performance falling slightly below that of lower-middle-income countries (see Graph 1a). Second, albeit Indonesia has been a democratic country for two decades, the quality of democracy (in a broader sense) in Indonesia has deteriorated since 2013 (see Graph 1b), a phenomenon alluded to by scholars as democratic regression (Warburton & Aspinall, 2018; Power & Warburton, 2020; Diamond, 2021). Third, even though the previous decade was relatively high compared to lower-middle countries, Indonesia's economic growth during the democratization era, from 1998 to 2021, was nearly the same as that of lower-middle

countries (see Graph 1c). Slower economic growth has the potential to wipe out Indonesia's dream of becoming a high-income country while also making it difficult to avoid the middle-income trap (Negara & Ramayandi, 2020; Resosudarmo & Abdurohman, 2018; Jamil, 2017; Basri et al., 2016; Aswicahyono & Hill, 2016). Based on these three facts, the Indonesian case study is expected to serve as a social laboratory for developing countries (notably newly democratized ones) interested in assessing what types of institutions are beneficial in accelerating economic growth at the sub-national level.

The following section of this paper will describe the data used in this study and the specifications of the econometric model developed. The study will then explain the impact of democracy and fiscal capacity on Indonesian economic growth, partially or jointly. This paper ends with conclusions and implications for Indonesia's economic growth policy.



Source: a) Adopted from World Bank (2022); a) Adopted from V-Dem Institute (2022) c) Adopted from World Bank (2022) and Jamil (2017)

Graph 1. The dynamic of democracy, fiscal capacity, and economic growth in Indonesia

METHODS

This study employs an econometric model, utilizing panel data in 34 provinces from 2016 to 2021, to assess the impact of democracy and fiscal capacity on Indonesian economic growth. Panel data is compiled from two prominent institutions. The Central Statistics Agency provides data on GRDP per capita growth, sectoral economic composition, and the Indonesian Democracy Index (IDI). Meanwhile, the data containing the Fiscal Capacity Index (FCI) at the provincial level is generated from the Ministry of Finance's annual publication.

The econometric model developed in this study is based on Knutsen's (2013) study, with the following equation:

$$G_{pt} = \beta_0 + \beta_1 \, log \, D_{pt} + \beta_2 \, log \, F_{pt} + \beta_3 log\left(D_{pt} * \, F_{pt}\right) + \beta_4 SEC_{pt}^h + \beta_5 COV_t + \upsilon_p + \varepsilon_{pt} \quad (1)$$

Where p and t denote provinces and years respectively. Under these equations, per capita GRDP growth (G) is determined by democracy (D), fiscal capacity (F), and the interaction of the two $(D * F)$.

This study incorporates a control variable, the h sector's contribution to GRDP (SEC^h), which is thought to influence GDP per capita growth. The reason for this is that provinces with an economic base in agriculture (AGR), mining (MINING), manufacturing (MANUF), and services (SERV) have different production technologies. Thus the amount of output produced varies. Several studies suggest that countries that transform to modern sectors such as manufacturing (see Cantore et al., 2017; Su & Yao, 2017; McCausland & Theodossiou, 2012) and services (see Kim & Wood, 2020; Eichengreen & Gupta, 2013; Buera & Kaboski, 2012) undergo rapid income growth. By including the composition of economic activity, this study is expected to be able to capture the sensitivity of the estimation results when sectoral effects are considered.

This study introduces a fixed-effect model comprising COVID pandemic shocks (COV) and time-invariant province characteristics (υ) into the model to account for time and province unit effects. The shock of the Covid pandemic must be included because it can create new normal conditions in the economic growth trajectory that have never existed before (Jamil, 2021; McKibbin & Fernando, 2021; Olivia et al., 2020; Sparrow et al., 2020). Meanwhile, differences in pivotal province characteristics are included because they can capture unobserved factors that certain variables cannot explicitly represent. If these two factors are considered, it is expected that plausible parameter estimation results will be obtained. Table 1 details the dependent, independent, and control variables used in this study based on definitions, measurements, and sources.

Furthermore, this study has three coefficients of interest to answer the research objectives. β_1 and β_2 represent the partial effects of democracy and fiscal capacity on per capita GRDP growth, respectively. Meanwhile, β_3 reflects the joint effect of democracy and fiscal capacity. To put it into context, if β_1 and β_3 are both positive, this indicates a positive democratic effect on per capita GRDP growth, where this effect tends to strengthen in regions with high fiscal capacity. If β_2 and β_3 have positive values, this indicates that fiscal capacity has a positive effect as long as the level of democracy in a region is high. These two examples demonstrate a complementarity relationship, whereas if β_1 (or β_2) has a different sign than β_3, it is referred to as a substitutability relationship (see Berry et al., 2012; Andersson et al., 2014; Hainmueller et al., 2019).

Table 1: Variables, definitions, and data sources

Variables	Definition & Measurement	Data Sources
Dependent		
Real GRDP growth per capita (G)	The annual percentage growth rate of GDP per capita at a constant 2010 base price as measured by: $G = log\left({GRDP_t}/{GRDP_{t-1}}\right)$	Central Statistics Agency
Main Independent		
Democracy (D)	The Indonesian Democracy Index (IDI) is composed of three components: civil liberties, political rights, and democratic institutions, which are all weighted, w, using the Analytical Hierarchy Process (AHP) method. $D = \sum_{i=3}^{3} w_i * I(A_i)$	Central Statistics Agency
Fiscal Capacity (F)	The Fiscal Capacity Index (FCI) is the financial capacity of each region which is reflected in total revenues (TR) minus revenue whose use is determined by the central government (SAF), and operational expenditure borne by the province (EX), as stated annually in the Ministry of Finance Regulation, PMK. $F = \frac{TR - SAF - EX}{Total\ Provinces}$ where: TR : original local government revenue + transfer income from central or other regional entities + other local legitimate income; SAF : cigarette tax + tobacco, reforestation, and oil and gas revenue sharing funds + special allocation fund + special autonomy funds + grants; EX : personnel expenditure + interest payments expenditure + profit sharing expenditure.	Ministry of Finance
Additional Control		
Sectoral Composition to GRDP (SEC^h)	The ratio of GRDP in sector h to GRDP. Sector h in this study consists of four sectors, namely: agriculture (AGRI), mining (MINING), manufacturing (MANUF), and services (SERV).	Central Statistics Agency
Covid Shock (COV)	1= the period of the covid-19 pandemic in 2020 & 2021, and 0= otherwise	Coding by the authors based on the information of the Indonesian Covid-19 Task Force

RESULT AND DISCUSSION

Summary of statistical description

Before delving into the appropriate research estimation results, a descriptive statistical review must be completed first. Descriptive statistics serve as the foundation for inferential statistical considerations, which will be discussed in the following section. Table 2 shows the summary results of the descriptive statistics for each variable used in this study.

Most of the standard deviation values are greater than the observed mean values. Five variables have high standard deviation values: real GRDP growth per capita (G), fiscal capacity (F), the interaction of democracy and fiscal capacity (D*F), dummy

Covid (Cov), and mining to GRDP (SEC^{MINING}). A high standard deviation value usually corresponds to an extreme observation value, resulting in overestimation or underestimation. To overcome this bias, estimates of the impact of democracy and fiscal capacity must include simulations without or with control variables.

Table 2 shows the three variables observed in this study and their characteristics. The average GDP per capita growth rate is approximately 2.45%. Due to a decline in the mining sector, the area's production base during the pandemic, Papua will experience the lowest per capita GRDP growth of -22.47% in 2020. In contrast, Central Sulawesi experienced the highest per capita GRDP growth of 17.26% in 2018, owing primarily to the emergence of industrialization expansion in the region.

Foremost, the Indonesian Democracy Index has an average value of approximately 74.22%, indicating a moderate level of democracy. West Sumatra experienced its lowest level of democracy in 2016, with a score of 54.41. In contrast, DKI Jakarta experienced the highest level of democracy in 2020. The extreme conditions in these two regions are explained by the differences in democratic levels in terms of civil liberties.

Finally, the average Fiscal Capacity Index is close to 1.00. The average fiscal capacity in this high category is largely driven by DKI Jakarta, which has more than six times the national average over the 2016-2021 period. In contrast, Gorontalo experienced low fiscal capacity in 2020, owing primarily to low local revenue long before Covid.

Table 2. Statistical description

Variables	Obs	Mean	SD	Min	Max
Dependent Variable					
Real GRDP growth per capita (G)	204	2.45	4.33	-22.47	17.26
Variable of Interest					
Democracy (D)	204	74.22	5.82	54.41	89.21
Fiscal Capacity (F)	204	1.00	1.59	0.10	11.47
Democracy (D) x Fiscal Capacity (F)	204	76.08	131.52	8.32	1012.69
Control Variables					
Covid Shock (Cov)	204	0.33	0.47	0	1
Agriculture to GRDP (SEC^{AGR})	204	0.20	0.09	0	0.44
Mining to GRDP (SEC^{MINING})	204	0.10	0.11	0	0.47
Manufacturing to GRDP (SEC^{MANUF})	204	0.16	0.11	0.01	0.43
Service to GRDP (SEC^{SERV})	204	0.55	0.13	0.24	0.88

Estimation result

This section will present the findings from the estimation of the impact of democracy and fiscal capacity on per capita GRDP growth, both partial and joint effects, to answer the research objectives stated in the introduction. As shown in Table 3, this study investigates the impact of democracy and fiscal capacity by first employing a specification that only includes covid shocks and provincial heterogeneity. This study examines the robustness of the estimation results by adding the sectoral composition of economic activity as an additional control variable, as shown in Table 4. To enable the interpretation of each variable, we examined the significance of the control variables used in this study before examining the effect of the main independent variable.

The control variable, in the form of the Covid shock, has a significant impact on GRDP per capita growth. Table 3 shows that the covid shock coefficient is six times

greater than the standard error. Table 4 also shows the covid shock coefficient, which is five times greater than the standard error. With a significance level of 1%, all models show a negative coefficient of the covid shock to the growth of GRDP per capita. Based on these findings, the Covid-19 pandemic period had lower per capita income growth of around 1.60-1.65% compared to the pre-pandemic period, assuming all other variables remained unchanged. These results indicate that the pandemic has indeed changed the economic growth trajectory of the provinces in Indonesia.

Table 3. The economic growth impact of democracy and fiscal capacity (including the covid shock)

Variables	Dependent: GRDP *per* Capita Growth (G)			
	(1A)	(1B)	(1C)	(1D)
Variable of interest				
Democracy (D)	0.0167		0.0161	0.00722
	(0.0300)		(0.0291)	(0.0300)
Fiscal Capacity (F)		-0.00490	-0.00487	-0.00824
		(0.00675)	(0.00672)	(0.00793)
Democracy (D) x Fiscal Capacity (F)				0.597*
				(0.304)
Control variables				
Covid Shock (Cov)	-0.0165***	-0.0165***	-0.0165***	-0.0160***
	(0.00257)	(0.00257)	(0.00258)	(0.00257)
Constant	0.0162***	0.0162***	0.0161***	0.0159***
	(0.000847)	(0.000859)	(0.000855)	(0.000858)
Provincial Fixed-Effect	Yes	Yes	Yes	Yes
Number of Obs.	204	204	204	204
R-squared	0.213	0.216	0.217	0.251
Number of Provinces	34	34	34	34

*Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1*

An additional control variable, namely sectoral composition, has varying effects on per capita GRDP growth. Table 4 shows that the role of the agricultural, mining, and service sectors in economic activity seems to have an impact that is not different from zero. On the other hand, in the same table, the manufacturing sector's role positively impacts the growth of GRDP per capita with a significance level of 5%. Based on the estimation results, every 1% increase in the ratio of manufacturing to GRDP will be followed by an increase in GRDP per capita growth of around 0.477-0.518%. These results indicate that the industrialization process can spur improvement in economic activity.

In this study, the additional control variables were adequate. The independent variable's ability to explain variation in per capita GRDP growth ranges from 21-25%. (see R-squared in Table 3). When the sectoral composition is considered, the independent variable's ability to explain variation in per capita GRDP growth rises to around 37-40%. (see R-Squared in Table 4). The significant control variables allow for a deeper understanding of the main independent variables, which are democracy (D), fiscal capacity (F), and the interaction of democracy and fiscal capacity $(D * F)$.

The estimation results show that democracy has no statistically significant effect on GRDP per capita growth. This is demonstrated by Models 1A and 1C, which show that the standard error is 1.8 times greater than the average coefficient of democracy's estimated impact. Even in the 1D model, the standard error is four times greater than the average coefficient of democracy impact estimation. When the sectoral composition is considered, this pattern of findings is consistent, with models 2B and 2C having a standard error of 1.16 times the average coefficient, which increases to 1.8 in the 2D model. The fact that the standard error of the democratic coefficient increases when the

multiplicative interaction variable is included indicates that the democracy variable is not immune to the correlation of other variables. Based on these results, democracy has a partial effect on per capita GDP growth, not different from zero.

Table 4. The economic growth impact of democracy and fiscal capacity (including the covid shock and sectoral composition)

Variables	Dependent: GRDP *per* Capita Growth (G)			
	(2A)	(2B)	(2C)	(2D)
Variable of interest				
Democracy (D)	0.0232		0.0228	0.0155
	(0.0268)		(0.0263)	(0.0279)
Fiscal Capacity (F)		-0.00506	-0.00503	-0.00780
		(0.00564)	(0.00562)	(0.00595)
Democracy (D) x Fiscal Capacity (F)				0.484**
				(0.234)
Control variables				
Covid Shock (Cov)	-0.0163***	-0.0163***	-0.0163***	-0.0160***
	(0.00290)	(0.00290)	(0.00292)	(0.00296)
Agriculture to GRDP (SEC^{AGR})	0.425	0.430	0.436	0.457
	(0.325)	(0.318)	(0.321)	(0.319)
Mining to GRDP (SEC^{MINING})	0.610	0.615	0.614	0.624
	(0.390)	(0.379)	(0.380)	(0.377)
Manufacturing to GRDP (SEC^{MANUF})	0.477**	0.483**	0.486**	0.518**
	(0.231)	(0.229)	(0.231)	(0.235)
Service to GRDP (SEC^{SERV})	0.208	0.215	0.213	0.250
	(0.208)	(0.208)	(0.209)	(0.215)
Constant	-0.318	-0.324	-0.324	-0.355
	(0.231)	(0.227)	(0.229)	(0.233)
Provincial Fixed-Effect	Yes	Yes	Yes	Yes
Number of Obs.	204	204	204	204
R-squared	0.375	0.378	0.379	0.401
Number of Provinces	34	34	34	34

*Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1*

Statistically, fiscal capacity appears to not affect per capita GRDP growth. The standard error in models 1B and 1C is 1.38 times greater than the fiscal capacity coefficient. Even though the standard error in the 1D model is lower than the coefficient value, it is not twice as low. When the sectoral composition is examined, patterns emerge. Models 2B and 2C have a standard error of 1.16 times greater than the fiscal capacity coefficient. Although the 3D model generates larger coefficients than the standard error, the value is not twice as large. As a result, the partial effect of fiscal capacity on per capita GRDP growth is equal to zero.

The joint effect of democracy and fiscal capacity on per capita GRDP growth is statistically significant. With a significance level of 10%, the 1D model shows that the interaction coefficient value is nearly twice as large as the standard error. Taking the covid shock and sectoral composition into account, the 2D model reveals that the interaction coefficient value is more than double the standard error, indicating that the joint effect of democracy and fiscal capacity is significant at the 5% level. In all models, the interaction coefficient consistently produces a positive direction. The 2D model is interpreted further because it controls the variables that may influence GRDP per capita growth. Assuming all other variables remain constant, the 2D model predicts that a 1% increase in democracy and fiscal capacity leads to a 0.48% increase in per capita income growth.

Discussion

This section explains why democracy and fiscal capacity do not partially affect per capita GRDP growth in Indonesia. However, in the following section, this study explains why the two have a strong joint effect on per capita GRDP growth. This section discusses control variables' impact on per capita GRDP growth in the Indonesian context, such as the COVID-19 shock and the composition of sectoral economic activity.

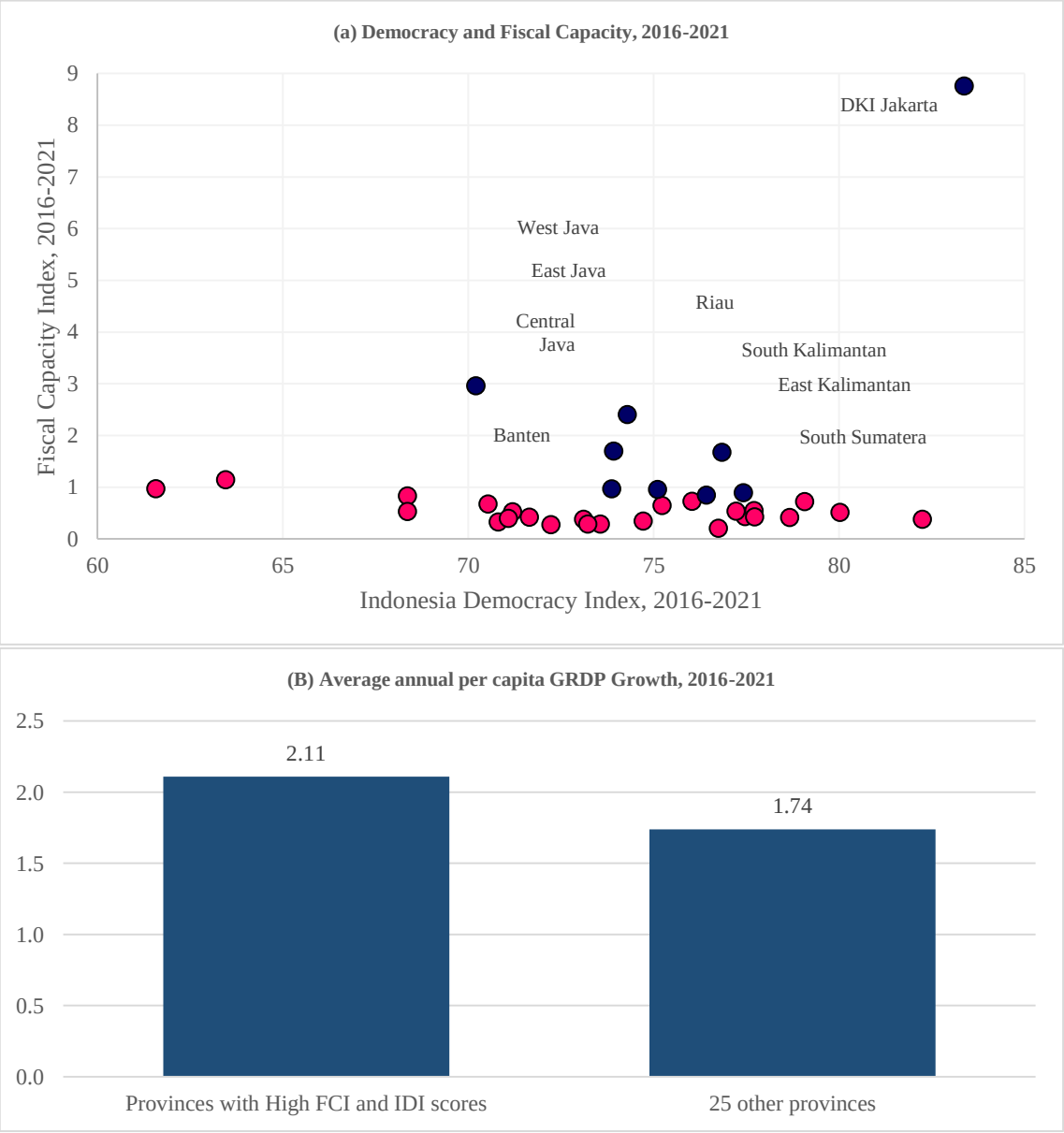
In this study, there is no evidence to support the partial effect of democracy on GRDP per capita growth because Indonesia is a democratic country that has only recently transitioned over the last two decades. During the transition period, Indonesia is more focused on procedural democracy, where democracy is only understood as a tool for the circulation of local elite power, as evidenced by the holding of regional head elections. Simultaneously, substantive democracy, defined as the electoral accountability of local leaders who promote regional economic activities such as improving the quality of public services to increase investment, is still not widely practiced in Indonesia (see Patunru et al., 2012). In other words, democracy does not instantaneously increase economic growth because it depends on the fundamental form of democracy used.

This study echoes Kis-Katos & Sjahrir (2017), Azis (2011), and Törnquist's (2006) empirical works in the Indonesian sub-national context. Kis-Katos & Sjahrir (2017) emphasized that, rather than increasing electoral accountability, as was widely expected before the reforms, the second step of political decentralization did not improve and may even worsen the local governance environment. According to Azis (2011), the assumption that local democracy will put accountability pressures on elected officials is not always correct. In a democratic system like Indonesia, political decentralization increases welfare only for developed regions, not for all, exacerbating regional disparities. Törnquist (2006) asserts, with the same nuance, that while democracy in Indonesia has a set of rules, local elites usurp the rules for their short-term interests. Instead of driving economic activity, most local democratic institutions already exist, but the majority of them are dysfunctional. Azis (2011) concludes that this phenomenon is political decentralization, which results in negative local elite capture and makes high economic performance difficult to achieve.

Like the findings on democracy, this study provides no empirical support for the partial effect of fiscal capacity on increasing economic activity in Indonesia. This is not surprising, given that the measure of fiscal capacity only touches on revenue. In the Indonesian context, regional fiscal capacity is considered adequate if the ratio of personnel expenditure, interest expenditure, and revenue-sharing expenditure is lower. Indeed, how much and how the budget is allocated for productive purposes, such as education, health, and basic infrastructure spending, is critical to stimulate economic activity.

The findings of this study supplement the set of case studies conducted at the regional level. According to Purbadharmaja et al. (2019), regional fiscal allocations for improving public services and infrastructure development boost regional economic capacity. Safitri et al. (2021) added that fiscal capacity must be accompanied by spending that stimulates economic activity while also involving the community. This can only be accomplished if the government can allocate funds based on the local community's needs. As a result, effective control over the distribution of public spending is required to ensure that it is on target.

In contrast to the partial effect, this paper confirms a joint effect of democracy and fiscal capacity on economic activity in the Indonesian context. These findings suggest that neither democracy nor fiscal capacity can be achieved unilaterally. As revealed in the literature at the outset, for democracy to fulfill the aspirations of its constituents, a strong regional fiscal capacity is required. High fiscal capacity also must be accompanied by quality spending that reflects the majority vote and stimulates economic activity. These two forces have a complementary relationship.



Note: We reclassified the level of democracy and local fiscal capacity. The level of democracy is high if the IDI score is more than 70%, while the level of local fiscal capacity is high if the FCI score is more than 0.75.

Source: Various series are calculated from the Central Statistics Agency and the Ministry of Finance.

Graph 2. The heterogeneity of democracy, fiscal capacity, and economic growth in Indonesia

Only nine provinces in Indonesia have a high level of democracy and fiscal capacity, which are as follows: DKI Jakarta, West Java, East Java, Central Java, East Kalimantan, Banten, Riau, South Sumatra, and South Kalimantan (see category these is

in Graph 2A). During the 2016-2021 period, the nine provinces' annual per capita GRDP growth rate is around 2.11. This region's economic activity is progressing faster than in other parts of Indonesia (see Graph 2B). This finding corroborates that democracy and fiscal capacity must go hand in hand to promote regional economic growth in Indonesia.

After answering the main objective of the study's question, another finding is that the Covid-19 shock has resulted in a different trajectory of economic growth than before. This outcome is unsurprising given that the Covid-19 pandemic has disrupted economic activity on both the demand and supply sides. The decline in people's purchasing power was caused by social restrictions that required only workers in the essential sector to work. On the supply side, the decline in output was caused by a lack of incentives for enterprises in the non-essential sector to produce. This finding is consistent with Olivia et al. (2020) and Sparrow et al. (2020) research in the Indonesian context.

Besides, in terms of sectoral composition, this research reveals that only the manufacturing sector could significantly speed up Indonesia's economic activity. This is because the manufacturing sector is thought to have high added value due to its strong forward and backward linkages (Verico, 2021). If the manufacturing sector experiences deindustrialization, the engine of Indonesia's economic growth will be hampered (Kuncoro, 2018). The agricultural and mining sectors have almost no influence because they are extractive, with economic activity centered in the upstream stage and weak in the downstream process (Shrestha & Coxhead, 2018). Meanwhile, the service sector has little impact on economic growth because the developing service sector has low skill and technology requirements (Pratomo & Manning, 2022; Wihardja & Cunningham, 2021; Allen, 2016). According to the explanation, preventing deindustrialization is critical in Indonesia (Tadjoeddin et al., 2017), given the weak leverage of the agricultural, mining, and service sectors.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion

Given that previous literature does not provide clear conclusions, we partially and jointly investigate the impact of democracy and fiscal capacity on Indonesia's economic growth. This study takes the setting of Indonesia to answer the puzzle in the literature because there is a decline in fiscal capacity, signs of democratic regression, and slowing economic growth. Case studies from sub-national Indonesia provide lessons for developing countries where democracy remains in its infancy.

This study concludes that economic growth has no partial effect on democracy or fiscal capacity. The study, on the other hand, confirms the joint effect of economic growth and democracy in the case of the Indonesian sub-national level. These results indicate that democracy and fiscal capacity must coexist. Despite the inclusion of province heterogeneity, the COVID-19 shock, and sectoral composition in the model, the conclusions are relatively robust.

Recommendations

Like a *tango* game, Indonesia's subnational economic growth strategy must simultaneously reform two forms of decentralization. First, political decentralization must be executed by encouraging the existence of a meritocracy for the developing democracy to be substantive. Second, fiscal decentralization should be implemented by

increasing regional fiscal capacity based on local revenue while improving the allocation of productive expenditures to stimulate economic growth.

Yet, the study's conclusions include two caveats for future literature enrichment. First, the results of this study remain questionable across multiple alternative measurement variables. As a result, more research is needed to address the issue of measuring democracy (see Amri & Pasha, 2020; Harbers et al., 2019) and fiscal capacity (see Hollenbach & Silva, 2019; Allers & Ishemoi, 2010), which several scholars have criticized. Second, the findings of this study have yet to address the issue of endogeneity and reverse causality, even though variables outside the model can influence democracy and fiscal capacity. As a result, further studies are needed to overcome this issue in the case of the multiplicative interaction model.

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