Government Size, Supply Chain Fiscal Decentralization Management, and Society Prosperity: A Data Panel Proof from Provinces in Indonesia

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Abstract— The improvement of society prosperity can only be achieved if the regional government has sufficient resources, both in the form of financial and non-financial resources. This study aims to examine the effect of government size and supply chain fiscal decentralization on prosperity. This research was conducted in all provinces in Indonesia in the 2014-2018 period. Prosperityis measured by the human development index, which the source is from BPS-RI, the size of the regional government is measured by the total income earned in a year, and supply chain fiscal decentralization is measured through revenue sharing funds, general allocation funds, and special allocation funds sourced from BPK-RI. Testing was done with multiple linear regression and the results of the study showed that government size and supply chain fiscal decentralization have a positive and significant effect on prosperity. This finding is empirical evidence of the importance of government size as measured by regional income and supply chain fiscal decentralization for regional governments in order to accelerate the improvement of prosperity for prosperity.

Keywords— *Government size, supply chain fiscal decentralization, prosperity,* supply chain management

1. Introduction

Regional autonomy is enforced in Indonesia based on Law Number 22 of 1999 which was revised to Law Number 32 of 2004 concerning Regional Government has triggered demands for the formation of a very massive new autonomous region. The implementation of autonomy has consequences for local governments including the obligation to improve services and prosperity of the society in, fairly, equitably, and sustainably [1].

Improvement of society prosperity can only be realized if local governments have good financial performance, because development activities and the provision of public services in order to realize the improvement of people's prosperity must be supported by adequate funding [2]. Regional government finances come from Original Local Government Revenue (PAD), balance funds and others (Law Number 33 of 2004). Equally important, another factor that can affect people's prosperity is the size of local governments [3].

The prosperity of the Indonesian people as stated by UNDP [4] in 2016 was ranked 113 out of 188 countries and was below the Human Development Index (HDI) of Singapore, Brunei Darussalam, Malaysia and Thailand. On the contrary, according to BPS-RI [5] in 2016, there were 12 provinces that had reached the "high" level category of human development, 21 provinces were in the "medium" category and one province that was still in the "low" level, namely Papua Province. Whereas in Indonesia, there are 312 districts / cities or around 60.70 percent that have reached the "medium" level of human development. Around 28.21 percent of districts / cities are at the "high" level and 3.70 percent are at the "very high" level and 7.39 percent are at the "low" level. The imbalance in the level of prosperity of local governments in Indonesia is caused by inequality in development [5]. Meanwhile, according to [6], almost 90% of the ratio of financial independence and efficiency ratio of local governments in Indonesia is classified as "very low". Meanwhile, according to the Corruption Eradication Commission, there are still leaks in regional income in Indonesia, where only half of the revenue can be realized [7]. This shows that the size of the government and the balance funds have not been able to realize prosperity for the society vet.

This research is important since there are still inconsistent results of research on government

size, balance funds and prosperity. [3] showed that reducing the size of government in America had a negative influence on economic growth.

[8] states that an increase in government size leads to an increase in consumption, and ultimately an increase in economic growth. [9] find that local government size has a positive effect on the human development index. But according to [10], a large government size resulted in a decline in economic growth. [11] concluded that for developed countries, there is a negative correlation between government size and economic growth. [12] the size of local government had a non-linear relationship to the human development index.

[13] finds a positive impact of supply chain fiscal decentralization on health and education in Argentina. [14] conclude that the effectiveness of supply chain fiscal decentralization can enhance human development and also strengthen federations in Pakistan. [14] state that there is a significant and positive influence between supply chain fiscal decentralization on human development. [15] has find that an increase in decentralization funds has a positive effect on the amount of public spending and economic growth, that has a positive impact on HDI and thus cause a decrease in the number of poor people in Indonesia. However, [16] provided evidence that there was no significant relationship between supply chain fiscal decentralization and economic growth. [17] argued that the relationship between economic growth and supply chain fiscal decentralization was negative in the case of developing countries, whereas developed countries were not significant. [18] stated that supply chain fiscal decentralization in China had a negative impact on regional economic growth.

2. Literature Review and Hypothesis

Stewardship theory describes a situation where management is not motivated by individual goals but rather is aimed at their main outcome goals for the benefit of the organization. The theory assumes that there is a strong relationship between organizational satisfaction and success. Organizational success illustrates the maximization of the utility of principals and management groups. Maximizing the utility of this group will ultimately maximize the interests of individuals in the group [19]. Stewardship theory can function as an accountability mechanism to ensure good monitoring, auditing and reporting in order to help achieving organizational goals. Leaders encourage stewardship in their followers through various relational, motivational, and supportive leadership behaviors contextually. [21] find that stewardship was not created through formal rules but more

facilitated through organizational structures that help leaders to produce interpersonal and institutional trust. Stewardship theory has been applied to accounting research in public sector organizations such as government organizations [22] and other non-profit organization.

Based on Law No. 33/2004, balancing funds are from APBN revenues allocated to regions for funding regional needs in the context of implementing decentralization, so that balancing funds are often also referred to decentralization funds (supply chain fiscal decentralization) [23]. Balancing funds consist of revenue-sharing funds, general allocation funds, and special allocation funds [24].

The size of the organization shows the size of the organization as well as the size of the local government also shows how big the regional government is. Large organizations are more likely to have many rules and regulations than small organizations [25]. The size of an organization can be measured in several ways such as the number of employees, total assets, total income, and the level of productivity [26]. In the context of government, the size of a government can be seen from the total income earned in a year.

Prosperity is a system of life, social, material, and spiritual of life encompassed by a sense of safety, decency, inner and outer peace, which makes it possible for every citizen to make an effort to fulfill the physical [27], spiritual and social needs as well as possible for himself, family as well as the society by upholding human rights and human obligations in accordance with Pancasila (Law of the Republic of Indonesia No.11 of 2009). The measurement of society prosperity is more comprehensive by using (1) the level of income per capita, (2) the level of education and (3) life expectancy constructed into the Human Development Index. In addition, economically the prosperity of an ordinary country's life is measured through various instruments such as economic growth (growth), per capita income (per capita income) and the Human Development Index (human development index).

2.1 Local Government Size and Society Prosperity

Each local government certainly has a different size as the characteristic of local government [28]. Local government as a government organization is included in the category of non-profit organizations, has income sources or income that is able to describe the size of local government [29]. Resources that are sufficient to make it easier for organizations to choose work program alternatives more freely and flexibly, so that the government can increase revenues and improve services to prosper the society [30].

The results of research related to the size of local government and society prosperity showed that reducing the size of government in America had a negative influence on economic growth [31]. An increase in government size leads to an increase in consumption, and ultimately an increase in economic growth [32]. Local government size has a positive effect on the human development index. A large government size results in a decline in economic growth. For developed countries there was a negative correlation between government size and economic growth. The size of local government had a non-linear relationship to the human development index [33].

Based on the explanation above, then the hypothesis can be formulated as follows:

H1: The size of the local government has a positive effect on people's prosperity.

2.2 Supply chain fiscal Decentralization and Society Prosperity

Supply chain fiscal decentralization is a source of regional income coming from the APBN to support the implementation of regional government authority in achieving the objectives of regional autonomy, which is to improve services and public prosperity, balance funds is often also referred as decentralization / supply chain fiscal decentralization funds (Law Number 33 2004). In using it in government programs, the balance fund is monitored by the central government, so that local governments are demanded to continue to contribute to good performance in overcoming the problem of inter-regional public service effects, and to create stability in economic activities in the regions in order to achieve public prosperity [34].

The results of the study related to balance funds (supply chain fiscal decentralization) and society prosperity find a positive impact of supply chain fiscal decentralization on health and education in Argentina. The effectiveness of supply chain fiscal decentralization can enhance human development and also strengthen federations in Pakistan. There is a significant and positive between influence supply chain fiscal decentralization on human development [35]. Improvement of decentralization fund positively affects the amount of public expenditure and economic growth which has a positive impact on HDI and thus causes a decrease in the number of poor people in Indonesia. However, evidence that there was no significant relationship between supply chain fiscal decentralization and economic growth. The relationship between economic growth and supply chain fiscal decentralization was negative in the case of developing countries, whereas developed countries are not significant. Supply chain fiscal decentralization in China had a negative impact on regional economic growth.

Based on the explanation above, then the hypothesis can be formulated as follows:

H2: Balance funds have a positive effect on people's prosperity.

3. Research Methodology

Each This research was conducted on 34 provincial governments in Indonesia in the 2014-2018 period. The election of the provincial government as the object of research was because the provincial government also received balance funds from the central government on a regular basis aimed at implementing decentralization (Law Number 33, 2014 article 1 paragraph 19 concerning on Financial Balance between the Central Government and Regional Governments). The sampling method in this study uses purposive sampling with criteria that the selected provincial governments have HDI data sourced from BPS-RI, and data on total regional income and data on balance funds sourced from BPK-RI for the 2014-2018 period. Based on the criteria, all (34) provincial governments have fulfilled the criteria, so they can be examined. Prosperity is measured by the human development index. The size of the regional government is measured by the total revenue obtained in a year. Balance funds are measured through revenue sharing, general allocation funds, and special allocation funds. The test is carried out with multiple linear regression, where previously testing of classical assumptions was conducted to ensure the resulting regression model had been estimately accurate, unbiased and consistent. The regression model of this research is as follows:

$HDI = a + b_1GS + b_2FD + e$

HDI= Human Development Index GS = Government Size a = Constant FD = Supply chain fiscal Decentralization b1,b2 = Regression Coefficient e = Error

4. Research Result

Based on the results of descriptive statistical testing, the description of government size, supply chain fiscal decentralization and public prosperity in the provincial government in Indonesia for the period 2014-2018 can be seen in the following table:

Table 1. Descriptive Statistic

		Minim	Maxim		Deviation
Variable	N	um	um	Mean	Standard
Government Size	17	1.21	64.82	8.29	10.34

	0				
Supply chain fiscal	17				
Decentralization	0	0.80	18.97	3.20	3.12
	17				
Prosperity	0	56.75	80.47	69.17	4.14
	17				
Valid N (listwise)	0				

Source: Processed Data, 2019

Descriptive statistical test results indicate that province with the lowest revenue is Gorontalo Province at Rp 1.21 Billion (which occurred in 2014), the highest total provincial revenue owned by DKI Jakarta Province at Rp64.82 billion (which occurred in 2017), the average value of the total income average of the provincial government in Indonesia was Rp8.29 Billion and on average during the observation period, the largest government size based on total revenue was DKI Jakarta Province at Rp53.57 billion, West Java Province at Rp28.01 Billion and East Java Province at Rp25.95 billion. The lowest supply chain fiscal decentralization received by Gorontalo Province was Rp0.80 billion (which occurred in 2014), the highest supply chain fiscal decentralization was received by DKI Jakarta Province by Rp18.97 billion, the average value of supply chain fiscal decentralization received by provincial governments in Indonesia was IDR 3.20 billion and on average during the period of observation the largest supply chain fiscal decentralization was received by DKI Jakarta Province at Rp13.53 billion, West Java Province at Rp8.87 billion and East Java Province at Rp. 8.28 billion. Connected to the total regional government revenue during the observation period, then the biggest revenue of mostly all provincial governments in Indonesia is supply chain fiscal decentralization revenue from the central government appproximately 25% (except Nangro Aceh Darussalam Province which is only at 20.53%). This shows that in general most of the revenue sources of the provincial government in Indonesia are transferred from the central government, so that it will have an impact on the low financial independence of the local government which will ultimately disrupt the acceleration to achieve prosperity for the people in each region. The highest prosperity measured by the highest Human Development Index (HDI) is Province of DKI Jakarta at 80.47 which occurred in 2018, while the lowest Human Development Index (HDI) is in Papua Province at 56.75, the average value of the Human Development Index (The HDI) of the provincial government in Indonesia is 69.17 (in the "medium" criteria). On average, during the observation period the provinces that have the highest Human Development Index (HDI) are DKI Jakarta with a value of 79.50 and DI Yogyakarta with a value of 78.24. This finding strengthens the results that the prosperity of the society in 146 district / city governments in the Sumatra Region is in the "medium" category.

This research has tested classical assumptions which consist of normality tests, multicollinearity tests, heteroscedasticity tests, and autocorrelation tests. Based on the results of classic assumptions testing, information that all variables used in this study have passed the classic assumption test.

Table 2. Hypothesis Testing Result

	Coeff	t sta	Si	F sta	Adjus	Concl
Hypothesis	icient	- tistic	g	tistic	ted R	usion
			0.			
Government Size and		5.46	00	29.89		Acce
Prosperity	0.156	7	0	0	0.146	pted
Supply chain fiscal			0.			
Differentiation and		4.89	00	23.95		Acce
Prosperity	0.470	4	0	6	0.120	pted

Based on the result of hypothesis testing (table 2), it indicates that the size of the government and supply chain fiscal decentralization have a positive and significant effect on prosperity, thus all hypotheses are "accepted".

The finding that the government size has a positive and significant influence on prosperity strengthens the results of the study which finds that reducing the government size in America has a negative influence on economic growth. An increase in government size leads to an increase in consumption, and ultimately an increase in economic growth [36]. The size of local government has a positive effect on the human development index. This is because sufficient resources make it easier for organizations to choose work program alternatives more freely and flexibly, so that each program or work plan for development and services to the society can be fulfilled because the government has sufficient budget and does not rely on external sources of income. These findings contradict the results of study which found that large government size resulted in a decline in economic growth [37]. For developed countries there was a negative correlation between government size and economic growth. The size of local government has a non-linear relationship to the human development index [38].

The supply finding that chain fiscal decentralization has a positive and significant effect on prosperity has strengthened the results that find a positive impact of supply chain fiscal decentralization on health and education in Argentina. The effectiveness of supply chain fiscal decentralization can enhance human development and also strengthen federations in Pakistan. There is a significant and positive influence between supply chain fiscal decentralization on human development. An increase in decentralization funds has a positive effect on the amount of public spending and economic growth that has a positive

impact on HDI and thus causes a decrease in the number of poor people in Indonesia. This is because local governments know the characteristics of their respective regions and can be trusted to allocate funds to the economic sector more efficiently than the central government [39]. Supply chain fiscal decentralization will make local governments more aware of what the society wants and needs. However, this finding does not support the study which provided evidence that there was no significant relationship between supply chain fiscal decentralization and economic growth. The relationship between economic growth and supply chain fiscal decentralization was negative in the case of developing countries, whereas for developed countries were not significant. Supply chain fiscal decentralization in China had a negative impact on regional economic growth.

5. Conclusion

Based on this research, it can be concluded that the size of the government and supply chain fiscal decentralization have a positive and significant effect on society prosperity. This shows that to improve the society prosperity, the regional government must increase regional income and decentralization funds. Supply chain fiscal decentralization, which has a positive effect on society prosperity, shows that supply chain fiscal decentralization in Indonesia is on the right track. Recommendations from this study as follows: (1) increasingOriginal Local Government Revenue through Local Revenue Enhancement by raisingregional tax revenues and levies in various sectors as well as improving the performance of regionals' companies and increasing the management results of separated regional wealth; (2) re-evaluating regional financial management in this decentralization era with the principle of "effectiveness and efficiency" is needed; (3) implementing efficient regional expenditure related to employee expenditure and capital expenditure; (4) optimizing regional budget planning and avoiding delays in the preparation of regional budget that often occurs to accelerate the economic rolling of the regional.

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