160

Int. J Sup. Chain. Mgmt   Vol. 9, No. 6, December 2020

The Effect of Gross Regional Domestic Product and Fiscal Decentralization on Supply Chain Fiscal Capacity Management in Papua Province

A. Elsyan Rienette Marlissa

Faculty of Economics and Business, Cenderawasih University, Jayapura, Papua, Indonesia

elsyan_marlissa@yahoo.com

Abstract— **This study aims to analyze the Effect of Gross Regional Domestic Product and Supply Chain Fiscal Decentralization on Supply Chain Supply Chain Fiscal Capacity Management in Papua Province. This study used secondary data analyzed by linear regression analysis with pooled data types within 10 years using Two Stage Least Square (2SLS). The results indicate that Gross Regional Domestic Product, Regional Tax, and Regional Retribution simultaneously have a significant effect on Supply Chain Fiscal Capacity Management with a total effect of 91.36 percent, while the remaining 8.64 percent is influenced by other variables not observed in this study.**

Keywords— *Gross Regional Domestic Product, Supply Chain Fiscal Decentralization, Supply Chain Fiscal Capacity, Supply Chain Management*

1. Introduction

Papua Province is a province located in the eastern most of Indonesia. Therefore, there are various challenges faced by the Government of Papua. The most obvious challenge is the needs of an enormous development due to Papua's geographical conditions which are still relatively underdeveloped. This problem causes an impact on the regional Supply Chain Fiscal Capacity Management of Papua Province [1].

Regional Supply Chain Fiscal Capacity Management can be seen from the amount of the Regional Budget Revenue. Based on Permendagri (the Minister of Internal Affairs regulations) no. 13 of 2006, Supply Chain Fiscal Capacity Management consists of local own-source revenues, balancing funds, and other revenues. Each Province in Indonesia, including Papua Province, is required to manage its finances as its independence. Meanwhile, the independence of regional Supply Chain Fiscal is shown by an increase in local own-source revenues and its contribution to local revenue.

In 2017, the regional revenue of the Papua province reached Rp.13.9 trillion, with the contribution of the local own-source revenue of only 7.23%, the Balancing Fund of 24.8%, and other legal revenues of 67.9%. In terms of regional expenditures, Papua Province experienced a budget deficit of Rp. 1.5 trillion. This happened because the regional Supply Chain Fiscal Capacity Management cannot meet such massive development needs. In other words, Papua's Local Revenue has not contributed much to regional expenditures through its programs and activities.

To realize Supply Chain Fiscal independence, local governments need to increase economic growth. Economic growth is closely related to the growth of goods and services measured by the Gross Domestic Product (GDP) at the national level and the Gross Regional Domestic Product (GRDP) of province/regency/city. According to Boediono in Situngkir [2], economic growth is a process of increasing output per capita as measured by GRDP per capita.

The success of decentralization is related to the financial capacity of the region because to carry out various tasks and functions in services and development for the community adequate funds are needed [3]. Financial capability is one of the important indicators to measure regional autonomy because financial capability can show the independent level of the region. Regional independence is not only interpreted in terms of the financial independence of the regional government towards the central government, but also in terms of the economy in which the region is truly able to develop the economy in all development sectors.

The economy of Papua in 2015 increased compared to the previous year in which the Papua Province's GRDP growth in 2014 reached 3.81% while in 2015, the growth was 7.97%. The economic growth of Papua in 2013 was 8.55% and in 2012 it was 1.72%. Whereas in 2001 experienced contraction of -4.28%. In 2015, the highest growth was achieved by government administration, defense and compulsory social security by 11.03%.

The growth of local own-source revenue of Papua Province in 2008 decreased from the previous year of -9.86%. However, in 2016, the growth was quite high at 20.24%. The average

growth of regional Supply Chain Fiscal Capacity Managementin 2007-2016 in Papua Province was 16.28%. Unfortunately, with such growth rate, Papua province has not been able to be independent in Supply Chain Fiscal decentralization.

Economic development is an important factor because it reflects all the activities of each sector in society. Economic development can encourage the increase of regional income obtained through taxes, retribution, etc. Theoretically, the higher the contribution of regional own-source revenues, the higher the region's ability to finance its own needs that indicates a positive regional financial performance. This can be interpreted as regional independence in financing its needs.

In fact, the level of economic growth in Papua Province has not been able to significantly influence the degree of Supply Chain Fiscal decentralization as a form of regional financial independence.

The implementation of Supply Chain Fiscal decentralization policies should provide a change in the structure of regional finances. The granting of regional financial balancing funds is in accordance with Law No.32 and 33 of 2004 that with the authority of local governments in managing their resources, it is expected to increase the attention of local governments to their communities. This policy should have an impact not only on improving regional economic performance but also in increasing the welfare of the community.

Based on the background, we want to see how the influence of GRDP and Supply Chain Fiscal decentralization on Supply Chain Fiscal Capacity Managementin Papua Province.

2. Literature Review

Supply Chain Fiscal decentralization is one of the main components of decentralization [4]. Supply Chain Fiscal decentralization was officially applied on January 1, 2001, based on RI Law No. 25 of 1999 completed by RI Law No. 33 of 2004. Supply Chain Fiscal decentralization is the transfer of authority to the regions in managing their financial resources so that they have more opportunities in managing their households.

According to Keynes [5], Supply Chain Fiscal Capacity Managementis problems arising in developing countries such as Indonesia due to a lack of aggregate expenditures. Aggregate expenditure is spending in the economy at a specific period with different price levels. The expenditure examples, in this case, are spending on development and government investment. So, it can be concluded that the Supply Chain Fiscal Capacity Managementof a region will affect the development costs in the regional budget. The higher the Supply Chain Fiscal Capacity Managementof a region, the sooner the activities and regional development

plans can be realized so that it can accelerate development that affects economic growth positively.

According to Sadono Sukirno [6], Gross Regional Domestic Product (GRDP) is the amount of gross value added arising from all economic sectors in a region. The gross added value is the value of production (output) minus the intermediate cost. Components of gross value added include components of income (salaries, interest, land rent, and profits), depreciation, and net indirect taxes. So, calculating and sum up the gross added value of each sector will result in a GRDP.

Based on empirical research by Joko Tri Haryanto [7] entitled Regional Autonomy A Perspective with the Path Analyst Method, it shows that local tax variables and revenue-sharing funds have a significant relationship to regional Supply Chain Fiscal capacity. While regional retribution and service GRDP do not have a significant effect on regional Supply Chain Fiscal capacity.

3. Research Methods

This study used secondary data, i.e. GRDP, Regional Retribution, and Supply Chain Fiscal Capacity Managementcollected from the Central Bureau of Statistics of Papua. This research was conducted by observing time-series data for 10 years, from 2007 to 2016.

We used a quantitative analysis method, i.e. the linear regression equation approach with the pooled data which is a combination of time-series data and cross-section [8].

The model identification is the first stage in determining the equation for which the parameters will be estimated.

$$CPF_t = \beta_{20} + \beta_{21} Y_t + \beta_{22} RTAX_t + \gamma_{21} RRET_t + \mu_{2t}$$

Note:

CPF_t : Supply Chain Fiscal Capacity
$RTAX_t$: Regional Tax
$RRET_t$: Regional Retribution

The model identification aims to determine whether the parameter estimation can be done through the reduced form of the simultaneous equation system so that an appropriate method can be determined. The result is:

(Model)

$$CPF_t = \beta_{20} + \beta_{21} Y_t + \beta_{22} RTAX_t + \gamma_{21} RRET_t + \mu_{2t}$$

From the formula above, the results are:

K : 16
M : Model 2 = 4
G : Model 2 = 3

Table 1. Model Identification

Model	K-M	-1	Model Identification
Model	12	2	Overidentified

Source: Processed Data, 2019

Based on the table above, it can be seen that all models in this study are in the overidentified category, so that the parameters in the equation have more than one estimation result. Therefore, we used Two Stage Least Square (2SLS)

4. Results and Discussion

Equations The estimation results of the simultaneous equation model on Supply Chain Fiscal Capacity Managementshow that with a significance of 0.05, the model can describe the problem very well. This can be seen that the R-square value is 0.9136 which means that the model can explain the problems by 91.36% and the remaining 8.64% is described by others.

Table 2. Estimation Results of Supply Chain Fiscal Capacity ManagementModel Parameters

Variable	Coefficient	Prob
C	2241103	0,0435
YT (PDRB)	0,005365	0,6000
RTAXT (Regional Tax)	1,493.697	0,0367
RRETT (Regional Retribution)	-2,442676	0,5318
R-squared	0,913637	
Adjusted R-squared	0,870455	
S.E. of regression	9939759	
F-statistic	2,115803	
Prob(F-statistic)	0,001363	
J-statistic	0,000000	

Source : Processed data, 2019

Simultaneous Hypothesis Testing (*F test*)
Hypothesis testing results:

$H_0 \rightarrow b_{YXi} = 0$ There is no significant effect of Gross Regional Domestic Product (Yt), local tax (RTAXt), and regional levies (RRETt) simultaneously on Supply Chain Fiscal Capacity Management(CPFt);

$H_1 \rightarrow b_{YXi} \neq 0$ There is a significant effect of Gross Regional Domestic Product (Yt), local tax (RTAXt), and regional retribution (RRETt) simultaneously on Supply Chain Fiscal Capacity Management(CPFt);

$\alpha = 5\%$.

Testing Criteria:
If $F_{count} \geq F_{table}$, H_0 is rejected and H_1 is accepted; or
If $F_{count} < F_{table}$, H_0 is accepted and H_1 is rejected.

The results show that F_{count} is higher than F_{table} (21,15803 > 4,757), then H_0 is rejected and H_1 is accepted which means that GRDP (Yt), regional tax (RTAXt), and regional retribution (RRETt) simultaneously and significantly affet Supply Chain Fiscal Capacity Management(CPFt).

Besides, table 2 also shows constant values and regression coefficients so that the multiple linear regression equation can be formulated as follows:

CPFt = 2241103 + 0.005365 Yt +14.93697 RTAXt - 24.42676 RRETt + *e*

GRDP (Yt) value is positive at 0.005 but it is not significant. It means that the GRDP (Yt) does not affect regional Supply Chain Fiscal Capacity Managementso the hypothesis is rejected. However, this result is consistent with the research conducted by Joko Tri Haryanto [6]. Economic activities carried out by the community in increasing the production of goods and services can be seen through economic growth. If the production of goods and services increases, economic growth will increase, and vice versa. This will also affect revenue from real public revenue. Thus, regional economic growth positively affects regional tax revenues. However, the GRDP is the performance of economic actors (households, companies, and government) in a certain area and does not fully belong to the government so it does not affect the regional Supply Chain Fiscal capacity.

Based on the regression results with the assumption that the other variables are fixed (ceteris paribus), the Regional Tax shows a positive value of 14,936 which means that if the regional tax increases by 1%, the Supply Chain Fiscal Capacity Managementwill increase by 14.936% so that the hypothesis is accepted. This result is consistent with the research conducted by Joko Tri Haryanto [6].

Based on the results of data analysis, the regional retribution shows a negative value of 24.426 and is not significant to Supply Chain Fiscal capacity. It means that the hypothesis is rejected. However, this result is consistent with the research conducted by Joko Tri Haryanto [6]. This happens because the data of regional retribution are not constant. The contribution of regional retribution in Papua province has not been maximized. Sometimes, the costs of some paid assets are not collected or missed so that the income does not meet the target.

5.   Conclusion

The GRDP, Regional Tax, and Regional Retribution simultaneously have a significant effect on Supply Chain Fiscal Capacity Managementwith a total effect of 91.36%, while the remaining 8.64% is influenced by other variables not observed in this study.

References

[1]. Herman, Asaribab. (2014). Laporan Studi Strategis Dalam Negri Peserta PPRA LII LEMHANMAS RI tentang Pembangunan Nasioan Provinsi Papua, Jakarta, Lembaga Ketahanan Nasional Republik Indonesia.

[2]. Boediono. 2009. Pengantar ilmu ekonomi No. 4. Yogyakarta: BPFE.

[3]. Riwukaho, Josef, Prospek Otonomi Daerah di Negara Republik Indonesia, Raja Grafindo, 2010.

[4]. Sidik, M., R. Simanjuntak, B. Brodjonegoro. (2002). *Dana Alokasi Umum : Konsep, Hambatan dan Prospek Di Era Otonomi Daerah.* Penerbit Buku Kompas, Jakarta.

[5]. Sadono Sukirno, (2004), Pengantar Teori Makroekonomi, Jakarta: Raja grafindo Persada

[6]. Sukirno, Sadono. (2004). Makro Ekonomi Teori Pengantar. Edisi-3. PT. Raja Grafindo. Persada, Jakarta.

[7]. Joko, Tri Haryanto. (2006). "Kemandirian Daerah : Sebuah Perspektif dengan Metode *Path Analisys*", <u>*Jurnal Manajemen Usahawan*</u>, Nomor 03 Th XXXV Maret 2006, Lembaga Management FE-UI, Jakarta, hal. 45.

[8]. Gujarati, Domar N. 2003. *Basic Econometric.* New York:The McGraw-Hill Companies,Inc.

[9]. Permendagri No. 13 Tahun 2006 tentang Pedoman Pengelolaan Keuangan Daerah

[10].   Permenkeu No. 37 Tahun 2016 tentang Peta Kapasitas Fiskal Daerah.

[11].   Republik Indonesia , (2004-a), Undang-Undang Nomor 32 Tahun 2004 tentang Pemerintah Daerah.

[12].   Republik Indonesia , (2004-b), Undang-Undang Nomor 33 Tahun 2004 tentang Perimbangan Keuangan Antara Pemerintah Pusat dan Pemerintah Daerah.