# Integration of Financial Capability and The Economy of North Sumatra (Panel Regression Model)

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**Abstract**. The district or province's financial capacity to integrate with the economy. The greater the contribution to the economic progress of North Sumatra. The research establishes regional financial integration (Local Revenue, asset spending, and General Allocation Fund) on North Sumatra's economic ability to develop development potential. The data analysis method uses panel data. The research results found that Local Revenue, asset spending, and General Allocation Funds, and General Allocation Funds simultaneously or together had an effect on the economy. Local Revenue and asset spending have a partial effect on the economy. The General Allocation Fund has no partial effect on the economy.

Keywords: Asset Spending, Economy, General Allocation Fund, Local Revenue.

## **INTRODUCTION**

According to (Yuliana, 2014) the economy is the output produced from various sectors which provides an overview of the progress or setbacks that have been achieved in the economic sector in a certain period. With a high economy, the welfare of society will be clearly visible, because a country's high economy is expected to be able to absorb the existing workforce.

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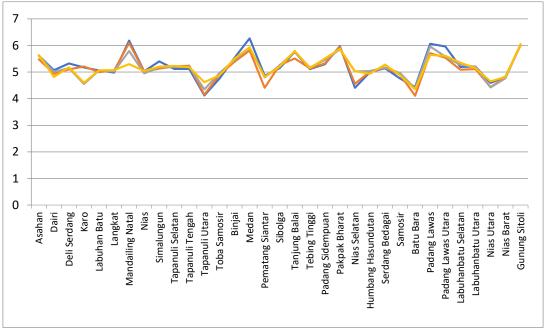
e-ISSN: 2964-2671; p-ISSN: 2964-2701, Pages 182-190

The regional economy of activities carried out consciously and continuously to create better conditions sustainably. The availability of funding has an impact on the economy and will support prosperity (Shin, 2012).

Apart from Local Revenue which reflects the economy, asset spending is also one of the variables that influences the economy (Adam Smith's classical economic theory), which states that capital expenditure and the economy are related to one another.

Local Revenue consists of regional taxes, regional levies, the results of separated regional wealth management, and other legitimate regional income.

An area said to be developed is an area that has high Local Revenue. This is understandable because with the high Local Revenue received by a region, the level of dependence of the Regional Government on the Central Government in terms of its APBD will decrease. The success of a region in increasing its income will have implications for increasing the region's ability to finance regional (Dewi Mahrani Rangkuty et al., 2022) spending needs. Regional spending is prioritized to protect and improve the quality of people's lives. Protection and improvement of the quality of life of the community is realized in the form of basic services, education, provision of health service facilities, social facilities and adequate public facilities, as well as developing a social security system.



Source: Statistics of North Sumatra

Figure 1. The Local Revenue for 33 City/District of North Sumatra

Local Revenue is a source of income that functions to finance regional needs such as the development of infrastructure and facilities (Rusiadi; Novalina & Sembiring, 2017). The economic rate in a region is also influenced by the infrastructure in the area, the better the facilities and infrastructure in the area, the more it will influence the economic rate in the area. the area (Siswiyanti, 2015).

The regencies/cities that have the highest General Allocation Fund are Medan City, Simalungun Regency and Deli Serdang Regency. Meanwhile, the districts/cities that have the lowest General Allocation Fund (Rangkuty et al., 2022) are West Pakpak Regency, West Nias Regency and North Nias Regency. Dewi and Ida (2018) state that the Local Revenue variable directly has a significant effect on the economy and the inflation variable does not have a significant effect on the economy (Dewi & Suputra, 2017) indicating that Local Revenue has a positive effect on the economy. However, the results of previous research were different from those conducted by (Paat et al., 2017) which stated that Local Revenue had a negative or no effect on the economy.

#### LITERATURE REVIEW

Growth is the development of economic activities which causes production in society to increase prosperity to increase (Sukirno, 2011). This theory was developed almost at the same time by Harrod (1984) in England and Domar (1957). They use different calculation processes but give the same results, so they are both considered to express idea and are called the Harrod-Domar theory. This theory complements Keynes's theory, where Keynes saw it in the short term (static conditions), while Harrod-Domar dynamic conditions. This model explains with the assumption that the economy can achieve strong growth (steady growth) in the long term. The assumptions referred to here are conditions where capital goods have reached full capacity, savings have an ideal proportion to the level of national income, the ratio between capital and production (CapitalOutput Ratio/COR) remains that the economy consists of two sectors (Y = C + I).

## **Locally-Generated Revenue**

According to Halim (2016:96), "Local Revenue is regional revenue from the region's own original economic resources. Local Revenue consists of: regional taxes, regional levies, the results of the management of separated regional assets, and other legal local revenue. Local revenue revenue obtained by the region itself is collected based on

## The International Conference on Education, Social, Sciences and Technology (ICESST) Vol.2, No. 2 July-December 2023

e-ISSN: 2964-2671; p-ISSN: 2964-2701, Pages 182-190

regional regulations in accordance with regulations. Local Revenue is a source of regional revenue used for capital. Mardiasmo, 2015, regional autonomy does not mean regional exploitation to produce the highest Local Revenue. If autonomy is interpreted as exploitation of Local Revenue, then regional communities will be the ones who will be burdened. Regional governments should not increase levies in the form of taxes, if they want to add them, they should be in the form of levies, while taxes should only be pursued as a last resort.

#### Asset spending

Asset spending to obtain local government fixed assets, namely equipment, buildings, infrastructure and other fixed assets. This group includes types of expenditure, including expenditure on apparatus and public services (Mardiasmo, 2009). According to (Erlina, 2013), asset expenditure is budget expenditure for the acquisition of tangible fixed assets that provide benefits for more than one accounting period.

According to (Deddi, 2010) Asset expenditure is expenditure whose benefits tend to exceed one budget year and will increase the number of assets or wealth of public sector organizations, which in turn will increase the operational budget for maintenance costs.

(Halim, 2011) asset expenditure budget expenditure obtains fixed assets and other assets that provide benefits. (Siregar, 2015) asset expenditure expenditure for procurement of fixed assets. In accrual-based accounting, expenditure to acquire fixed assets is categorized as fixed assets.

## **General Allocation Fund**

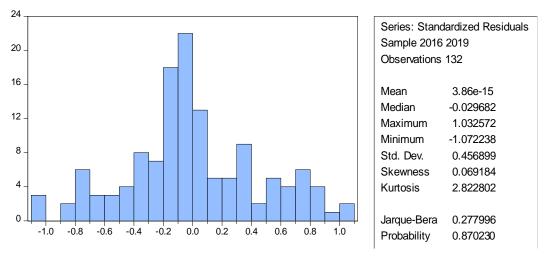
General Allocation Fund is an amount of funds allocated to each regional government in Indonesia once a year as funds used for regional development in accordance with the needs of a region. General Allocation Fund is one of the balancing funds which is part of regional income sources. General Allocation Fund is allocated based on a certain percentage of net domestic income specified in the APBN. General Allocation Fund for a region is determined based on certain criteria which emphasize aspects of equality and justice which are in line with the administration of government affairs where the formula and calculation of General Allocation Fund are determined in accordance with the law.

#### **RESEARCH METHOD(S)**

Panel data regression approach consisted of three models (Rusiadi, 2014): common effect model, fixed effect model, and random effect model. The common effect model approach is relatively simple because it assumes that the data behavior is the same at various times. While in the fixed effect model, differences between individuals are assumed to be accumulated from differences in their intercepts. In its application (Wardhana and Indawati, 2021), this model uses the dummy variable technique to obtain differences in intercepts. In the random effect model, the panel data where the interruption variables allow to be interconnected between individuals and time will be estimated. This approach accommodates the intercept differences in the error terms of each data. Namely using the Random Effect Method (Random Effect Model/REM) for this research.

### FINDINGS AND DUSCUSSION

Discussion of research results in this study, the normality test of the residuals was carried out with using the Jarque-Bera (J-B) test.



Source: Data processed, 2022

Figure 2. The result of J-B test

The correlation between GRDP and Local Revenue is 0.630356, GRDP and BM is 0.596341, GRDP and General Allocation Fund is 0.656231.

e-ISSN: 2964-2671; p-ISSN: 2964-2701, Pages 182-190

Total Panel (Balanced) Observations: 132						
Coefficient	Std. Error	t-Statistic	Prob.			
3.41E-07	2.28E-07	1.497928	0.0174			
1.91E-07	2.41E-07	0.791656	0.0305			
-1.14E-09	8.70E-10	-1.313178	0.1923			
5.269640	0.088223	59.73080	0.0000			
	Coefficient 3.41E-07 1.91E-07 -1.14E-09	CoefficientStd. Error3.41E-072.28E-071.91E-072.41E-07-1.14E-098.70E-10	CoefficientStd. Errort-Statistic3.41E-072.28E-071.4979281.91E-072.41E-070.791656-1.14E-098.70E-10-1.313178			

Table 1. The Result of Fixed Effect Model (FEM)

Source: Data processed, 2022

Table 2. The Result of Random Effect Model (REM)

Variable	Coefficient	Std. Error	t- Statistic	Prob.			
LOCAL REVENUE	-5.36E-08	1.86E-07	-0.287996	0.7738			
BM	2.42E-07	2.37E-07	1.022155	0.3086			
GENERAL							
ALLOCATION FUND	-9.01E-10	8.22E-10	-1.096031	0.2751			
С	5.192251	0.106407	48.79606	0.0000			
Effects Specification							
			S.D.	Rho			
Cross-section random			0.430376	0.8907			
Idiosyncratic random			0.150779	0.1093			
Weighted Statistics							
Adjusted R-squared	-0.003218	S.D. dependent var 0.15		0.152433			
Prob(F-statistic)	0.463820						
Source: Data processed 2022	)						

Source: Data processed, 2022

### The Influence of Local Revenue on Economic Growth

This can be seen from the prob value of 0.0174 <0.05. This means that H0 is rejected and Ha is accepted. The results of this hypothesis test show that partially there is a significant influence of Local Revenue on the economy in North Sumatra Province for the 2016-2019 period. The meaning of these findings is that Local Revenue has an important role in measuring the level of regional financial independence. The higher the realization of Local Revenue, the greater the percentage of the regional economy in the North Sumatra provincial government and vice versa, if Local Revenue decreases it can cause the level of the regional economy to decline.

## The Influence of Regional Asset Spending on Economic Growth

The results of this hypothesis test show that partially there is a significant influence of asset spending on the economy in North Sumatra Province for the 2016-2019 period. According to (Halim, 2016) one of the government expenditures is asset expenditure which means budget expenditure for the acquisition of fixed assets and other assets that provide benefits for more than one accounting period. Asset spending includes: spending on land, spending on equipment and machinery, spending on building and building assets, spending on road, irrigation and network assets, spending on other fixed assets, and spending on other assets.

An economy accompanied by increased social welfare can be achieved if asset spending is allocated appropriately. So that everything needed in the province concerned can be fulfilled. The results of the research show that asset spending has an influence on the economy of North Sumatra province. Even though it is significant, North Sumatra Province has an exclusive economic phenomenon. poverty or unemployment rate in North Sumatra Province. This can be shown by Batu Bara Regency being the Regency in North Sumatra Province that has the lowest economic rate. In fact, Batu Bara district has supporting infrastructure and facilities. However, the government is paying special attention so that the region still has the opportunity to develop even better. So from the results obtained and the analysis of the results that the first hypothesis, namely asset spending has a positive effect on the economy, is accepted. The results are in line with the results of research carried out by Nurmainah (2013) and Putra (2016) which stated that asset spending has an effect on the economy

## CONCLUSION AND RECOMMENDATION

The research results found that Local Revenue, asset spending and general allocation fund simultaneously or together had an effect on the economy. Local Revenue, asset spending has a partial effect on the economy. General Allocation Fund has no partial effect on the economy.

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e-ISSN: 2964-2671; p-ISSN: 2964-2701, Pages 182-190

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