

Available Online at: <u>https://www.scholarzest.com</u> Vol. 2 No. 12, December 2021 ISSN: 2660-5570

# INFLUENCE OF INDUSTRIAL AGLOMERATION, LABOR, AND HAPPY LEVELS ON ECONOMIC GROWTH

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Article history:		Abstract:				
Received: Accepted: Published:	22 <sup>nd</sup> October 2021 21 <sup>st</sup> November 2021 27 <sup>th</sup> December 2021	This research aims to know the Effects of Industrial Agglomeration, Labor Absorption and Wage Rates on Economic Growth on Sulawesi Island. Data used in research are secondary data sourced from the Central Statistics Agency. The method used in this study uses the analysis of the Linear Multiple Data Panel Regression, the 2010-2019 period on Sulawesi Island. The results of the analysis show that the influence of industrial agglomeration has a positive and significant effect on economic growth in Sulawesi. That is, any increase in industrial agglomeration of 1% will increase economic growth by 0.214029 in Sulawesi. The effect of labor uptake has a negative and insignificant effect on economic growth, but this decline cannot be explained in the year. And the effect of wage rates has a positive and significant effect on economic growth in Sulawesi. That is, any 1% increase in wages will increase economic growth by 0.177377 in Sulawesi.				

**Keywords:** Economic growth, industrial agglomeration, labor, wage rates

#### INTRODUCTION

Economic growth is a long-term economic problem, and economic growth is an important phenomenon experienced by the world lately. Economic growth in general is the process of changing the economic conditions of a country on a continuous basis towards better conditions for a certain period. Economic growth can be interpreted as a process of increasing the production capacity of an economy which is manifested in the form of an increase in national income. Economic growth as an inseparable part of economic development needs special attention by the government and also its people as an indicator

According to Untoro (2010:39), economic growth is the development of activities in the economy that cause goods and services produced in society to increase and community prosperity increases in the long run. Whereas according to Kuznets (in Sukirno, 2006:132), economic growth is a long-term increase in capacity of the country concerned to provide various economic goods to its population

1	'ERTUM	IBUHAN	ΕΚΟΝΟ	MI	
4.00 3.50 3.00 2.50 2.00 1.50 1.00 0.50 0.00					
	2015	2016	2017	2018	2019
	0.28	0.28	0.29	0.29	0.29
SULAWESI DARAT					
SULAWESI TENGGARA	0.75	0.77	0.78	0.79	0.81
	0.75 2.92	0.77	0.78 3.02	0.79 3.08	0.81 3.14
SULAWESI TENGGARA	2.92	2.99	3.02	3.08	3.14

*Source: Central Agency for Statistics of the island of Sulawesi 2015-2019 Figure 1.1 Economic growth on Sulawesi Island 2015-2019* 

Based on the picture above, Economic growth on the island of sulawesi can be seen in years to always experience an increase and decline, but in 2019 the first position was in the southern sulawesi province, and in second place in the central sulawesi province, third position in the southeastern provinces of Sulawesi and northern sulawesi, fourth position in the western sulawesi province, and the last position in the province of gorontalo. Agglomeration is an industrial grouping in one location. Agglomeration in Indonesia is adopted in the form of an industrial zone, which is an area designated by the government as the location of industrial activities. In this zone stands individual (stand-alone) industries and industries that group in industrial estates ( industrial estate ). The concept of agglomeration in the economic context of geography is related to the spatial concentration of the population and economic activities. This is in line with what Montgomery (kuncoro, 2002) points out that agglomeration is the spatial coscentration of economic activity in urban areas due to savings due to adjacent locations associated with spatial clusters of companies, workers and consumers. The basic aim of agglomeration or concentric theory is to integrate business groups, so that in the location it is expected to be able to attract and bring up other businesses.

A	GLOM	ERASI I	NDUST	RI	
NILAI					
6	2015	2016	2017	2018	2019
SULAWESI BARAT	10.32	9.53	9.96	9.71	9.73
	5.95	6.11	6.14	6.17	6.4
	13.88	14.06	13.82	12.08	13.16
	9.72	11.87	12.35	12.66	13.01
	9.46	9	9.36	9.16	8.73
GORONTALO	4.18	4.21	4.09	4.11	4.27

## Source: Sulawesi Island Statistics Center Agency 2015-2019

Figure 1.2 Industrial Agglomeration on Sulawesi Island 2015-2019

Based on the picture above, Industrial agglomeration on the island of sulawesi from year to year has always experienced an increase and decline, but at the highest level the first position is in the southern sulawesi province, and second place in the central sulawesi province, and third position is in the western sulawesi province, fourth position is in the northern sulawesi province, fifth position is in the southeastern province, the last position is in the province of gorontalo.

labor can be charged as providing employment that has one of the economic development goals, especially in Indonesia, where labor force growth is greater than employment opportunity growth. Increasing and improving economic development will reveal the absorption of labor, thereby affecting the availability of labor in an area. There are two factors that influence the state of labor, namely the demand factor (affected by the dynamics of economic development) and the supply factor (determined by the company's population structure).

			r i chugu kci	ja Di palaa Sa		
Tahu	Provinsi	Provinsi	Provinsi	Provinsi	Provinsi	Provinsi
n	Sulawesi	Goronta	Sulawesi	Sulawesi	Sulawesi	Sulawesi
	Barat	lo	Selatan	Tengah	Tenggara	Utara
2015	595.905	493.607	3.485.492	1.327.418	1.074.916	1.0000.032
2016	624.182	546.668	3.694.712	1.459.803	1.219.548	1.110.564
2017	595.004	524.316	3.598.663	1.374.214	1.160.974	1.040.826
2018	619.395	555.533	3.774.924	1.451.491	1.207.488	1.095.145
2019	1641.613	562.087	3.830.096	1.439.759	1.217.983	1.131.521

#### Tabel. 1.1 Tenaga Kerja Di pulau Sulawesi

Based on the urain of the above table it can be explained that the uptake of existing labor d first-order sulawesi island is the highest in southern sulawesi province, and second in the central sulawesi province, the three southeastern provinces of Sulawesi, the four northern provinces of sulawesi, the five western sulawesi provinces and the lowest order, namely in the gorontalo province.

Wages according to Afzalur Rahman are the price of labor paid for his services in production. Whereas according to Hendri Anto, wages (tsaman) is compensation for services provided by a workforce. Determination of wage rates is most important for organizations because wages are often the single biggest company cost. Wage costs are included in the calculation of the cost of producing goods (cost of goodssold) This is also important for the kariyawan because wages are shaved to fulfill his life by determining status in society.

Tahu	Provinsi	Provinsi	Provinsi	Provinsi	Provinsi	Provinsi
n	Sulut	Sulsel	Sulbar	Sultra	Sulteng	Gorontalo
2015	2.150.000	2.000.000	1.655.500	1.6520.00	1.500.000	1.600.000
2016	2.400.000	2.250.000	1.864.000	1.850.000	1.670.000	1.875.000
2017	2.598.000	2.435.625	2.017.780	2.002.625	1.807.775	2.030.000
2018	2824286	2.647.767	2.193.530	2.177.052	1.965.232	2.206.813
2019	3.051.076	2.860.382	2.369.670	2.351.870	2.123.040	2.384.020
2020	3.310.723	3.103.800	2.571.328	2.552.014	2.303.711	2.586.900

Tabel 1.2 Upah Minimum Provinsi Pulau Sulawesi Tahun 2010-2021
( dalam ratusan ribu runjah-jutaan runjah)

Source: Central Statistics Agency, 2020

Bedasukan table above can be seen that UMP in the island province of sulawesi has increased every year but even though UPM in gorontalo has increased but is still recorded as the province with the lowest UMP. The determination of labor wages is determined based on the skills or skills possessed by the workforce. The minimum wage set has an influence on the production process, because with the higher wages set by the government the industrial company will do labor efficiency because wages are not elastic to labor demand which means it impacts the value of the PDRB.

#### **RESEARCH METHOD**

The research approach to be used in this study uses quantitative research. i.e. research conducted by testing statistics on yg data will be collected, the type of data used in this study uses secondary data, secondary data data that is not collected directly, but is obtained from the second party. This study uses secondary data from the Central Statistics Agency (BPS) publications collected including economic growth data based on Gross Regional Domestic Product (PDRB), labor absorption data, and wage rate data. The time period of data used in recent years. The variable used is divided into 2, namely the dependent variable and the dependent variable (independent variable). The dependent variable in this study uses panel data regression analysis. The panel data regression model in this study is as follows:  $Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e$ 

 $f = a + D_1 X_1 + D_2 X_2 + D_3 X_3 + e$ 

#### **RESULTS AND DISCUSSION**

- 1. Economic Growth without being influenced by any variable in the model remains valuable -1.028877 percent cateris paribus
- 2. Industrial agglomeration has a positive influence on the value of coefisein economic growth of 0.214029, this means any increase in industrial agglomeration then economic growth in Sulawesi increases by 0.214029 Percent.
- 3. Labor has a negative effect on economic growth with coefficients 0.168015, this means any increase in labor then economic growth in Sulawesi decreases by 0.168015 Percent.
- 4. Wage Rate Positive effect on economic growth with coefficients 0.177377, this means any increase in wage rates then economic growth in Sulawesi increases by 0.177377 Percent.
- 5. Based on estimates of fixed effect modes, from the six provinces of Sulawesi then, areas that are experiencing positi growth f namely Sulawesi Province Southeast, Central, North and Gorontalo Province Whereas the Province gives. impact negative for economic growth, Sulawesi South, and Sulawesi West.

Effect Industrial Agglomeration Against Se-Sulawesi Economic Growth During the 201 Period 0 -20 19 From the results of the analysis it is known that the p-value variable industry agglomeration is 0.0000. When probabilit values as compared with a significant value of a 1%, the resulting probability value is less than 1%, and the decision is taken by H 0 rejected or industrial agglomeration has a significant impact on economic growth in the 201 time period 0 - 2019, Effect Upper Manpower Se-Sulawesi Economic Growth During the 201 Period 0 -20 19 From the results of the analysis it is known that the p-value labor variable is 0.2182. If the probability value is compared with the whole significant value a (1%, 5% and 10%) then, the resulting probability value is more from that, and the decision taken by H 0 accepted or labor does not have a significant impact towards economic growth in the 2010-2019 period ,Effect Wage Rate Against Se-Sulawesi Economic Growth During the 201 Period 0 -20 19, From the results of the analysis it is known that the p-value variable is 0.0000. When the probability value is compared with a significant value a 1%, the resulting probability value is compared with a significant value a 1%, the resulting probability value is compared with a significant value a 1%, the resulting probability value is compared with a significant value a 1%, the resulting probability value is compared with a significant value a 1%, the resulting probability value is less than 1 %, and the decision taken by H 0 rejected or wage rates have a significant impact on economic growth in the 2010-2019 time period.

#### DISCUSSION

After testing the assumptions and estimates of the model, the influence of industrial algomearas, labor and wage rates on economic growth in Sulawesi will be further investigated in the discussion points. The following are the results of testing of each variable free of Sulawesi's economic growth in 201 0 -2019:

Effect of Industrial Agglomeration on Economic Growth Based on the results of previous studies, the effect of industrial agglomeration on regional economic growth in Sulawesi had a positive and significant effect during the 2010-2019 period. This means that any increase in industrial agglomeration of 1 percent will increase Sulawesi's regional economic growth in the study period. Effect of Labor on Economic Growth Based on previous research findings, the effect of variable labor absorption on regional economic growth in Sulawesi is known to have a negative correlation and has no significant impact

on economic growth during the 2010-2019 period. This means that any 1% increase in labor uptake will reduce economic growth, but the decline in economic growth is not given significantly by labor variables in the Sulawesi region during the study period. Effect of Wage Rates on Economic Growth Based on previous research findings, the effect of wage rates on regional economic growth in Sulawesi is known to have a positive and significant effect on economic growth during the 2010-2019 period. That is, a wage increase of 1% will encourage economic growth in the Sulawesi region during the study period.

#### CONCLUSION

- 1. The effect of industrial agglomeration on economic growth is positive and significant, so the government needs to expand and manage the aggregation area optimally so that the focus of activities is evenly distributed throughout the Sulawesi region.
- 2. Governments can set policies, for example focusing more on regional development programs to increase labor absorption through work technology. In addition, with increasing industrial expertise, the government must direct measures of agricultural transformation, bearing in mind that most economic growth is driven by consumption.
- 3. Governments can set policies, for example focusing more on regional development programs to increase labor absorption through work technology. In addition, with increasing industrial expertise, the government must direct measures of agricultural transformation, bearing in mind that most economic growth is driven by consumption.

#### REFERENCES

- 1. Arsyad, Lincoln. 2010. Development Economics. Fifth Edition. Yogyakarta: STIM YKPN.
- 2. Arifin, S. H. (2017). Effect of investment, labor, and consumption levels on economic growth in Makassar City in 2006-2015 (Doctoral dissertation, Alauddin Makassar State Islamic University).
- 3. Adisasmita , Rahardjo. 2013 , Theories of Economic Development, Economic Growth and Regional Growth; First Print.. Yokyakarta: Graha Science
- 4. Boediono. 2011. The theory of economic growth Yogyakarta: BPFE Yogyakarta.
- 5. (Betty yarsita agustina,2019) the influence of agglomeration and the vertical relationship of industry on industrial productivity in Indonesia
- 6. Canon, S. & Harun, U. R. (2006). Analysis, LQ shift share to measure the impact of urban expansion on regional economic performance. J. Perenc. Wil. and the city , 17 , 21-40.
- 7. Canon, S. (2007). . Impact Analysis of the Expansion of the Manado City Administration Area on the Economic Performance of Manado City and Other Areas in North Sulawesi Province. (Doctoral Dissertation, Padjadjaran Bandung University Postgraduate Program).
- 8. Cárdenas, L., & Fernández, R. (2020). Revisiting francoist developmentalism: The influence of wages in the Spanish growth model. 52, 260–268. https://doi.org/10.1016/j.strueco.2019.09.003
- 9. (Dwi yulianto/2017) Analysis of the effect of agglomeration, investment and labor on the economic growth of the central Java province in 2010-2014
- 10. Djojohadikusumo, Sumitro. 1994. Economic Basis for Growth and Development Economy, Jakarta: LP3ES
- 11. Ekwarso, H. (2014). Analysis of the Inter-Island Labor Force in Indonesia in 2012-2013. Journal of Social Economic Development, 4(11), 174-193.
- 12. Eriandy, F. M. (2021). Analysis of Agglomeration in Economic Corridors in Indonesia. Journal of Accounting and Management Economics, 20(2), 134-159.
- 13. Haq, F. S. (2017). Analysis of the Effect of Investment, Labor and Education Level on Economic Growth in the Yogyakarta Special Region for the 2009-2015 period. Scripture. Yogyakarta: Sunan Kaliawaga State Islamic University Sharia Economic Study Program.
- 14. Imam mukhlis, isnawati hidayah and sariyani (2018) "Button economic agglomeration, economic growth and income inequality in regional economies "
- Julianto, F. T. (2016). Analysis of the Effect of Large Industrial Amounts and Minimum Wages on Economic Growth in Surabaya City. JEB17: Journal of Economics and Business, 1(02) 229-255.(. J amzani so diq,2007) agglomeration and economic growth: the role of regional characteristics in Indonesia
- 16. Kusumasari, A., & Kartiadu, F. (2017). Industrial Agglomeration and Its Effect on West Java Economic Growth 2010-2014. Journal of Statistics & Computing Statistics Applications, 9(2), 29-42.
- 17. Kuincoro , M. 2014 , Regional Autonomy: Towards a New Era of Regional Compilation Edition 3. Jakarta:Erlangga.
- 18. Kuncoro, M. 2012 Economics of Agglomeration Dynamics & Dimensions of Spatial Industrial Clusters of Indonesia. Yogyakarta: YKPN STIM UUP .
- 19. Kadek fiba prana and pusti putu nata wirawan (2016) " the effect of population growth and economic structure on economic growth and unemployment in Indonesia. "
- 20. Lestari, I. (2021). Analisis Pengaruh Aglomerasi Industri, Investasi Industri, Dan Pendidikan Terhadap PDRB di Indonesia tahun 2010-2019 (Bachelor's Thesis, Fakultas Ekonomi Dan Bisnis Uin Syarif Hidayatullah Jakarta).
- 21. Li, Z. (2020). Industrial Agglomeration and Regional Economic Growth & Analysis of the Threshold Effect Based on Industrial Upgrading. Open Journal of Business and Management, 08(02), 971–982. <u>https://doi.org/10.4236/ojbm.2020.82061</u>.

- 22. Mukhlis, bernadette robiani, taufiq marwa dan rosmiyati chodijah (2017)" *agglomeration of manufacturing industrial, economic growth, and interregional inequality in south sumatra, indonesia*
- 23. Nazir, M. 2014. Research Method. Bogor: Ghalia Indonesia.
- 24. Noor, J. 2014. Analysis of Economic Research & Management Data. Jakarta: PT Grasindo
- 25. Nisfiannoor, M. 2009. Moderen Statistical Approach for Social Sciences. Jakarta: Humanika Salembah.
- 26. Sukirno. Sudono. 2011. Macro Economics Theory Introduction to the Third Edition. Definition of economic growth Growth Rajawali Pers, Jakarta
- 27. Sukirno, Sudono. 2011 Factors affecting economic growth media.neluk.com
- 28. Syamsu nujum and zainudin rahman (2019) " the effect of investment and inflation on economic growth in the city of Makassar "