

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY: APPLIED BUSINESS AND EDUCATION RESEARCH

2023, Vol. 4, No. 1, 305 – 311

<http://dx.doi.org/10.11594/ijmaber.04.01.29>

Research Article

Analysis of Leading Sectors in Improving the Economy East Java Province in 2016-2020

Sutrisno*

Faculty of Economics, University of Bojonegoro, Bojonegoro, Indonesia

Article history:

Submission January 2023

Revised January 2023

Accepted January 2023

*Corresponding author:

E-mail:

sutrisnoxanar13@gmail.com

ABSTRACT

East Java is a province that has a major influence on national GDP, therefore it is necessary to know which economic sectors can survive and be redeveloped so that the economy of East Java can return to stability as it was before the Covid-19 pandemic occurred. This research approach is a quantitative research. This research uses variables, namely the economic sector. The location to carry out this research is East Java Province. The data collection methods used are documentation and literature studies. The data analysis techniques used are Location Quotient (LQ) and Dynamic Location Quotient (DLQ). There are 5 economic sectors in East Java that are included in the base sector or leading sectors at the time before the Covid-19 pandemic (2016-2019) and during the Covid-19 pandemic (2020) based on the results of the location quotient analysis. Meanwhile, based on the results of the dynamic location quotient analysis, it is known that there are 9 economic sectors in East Java Province in the 2016-2020 period which are potential sectors to be developed.

Keywords: Covid-19 Pandemic, Economic Development, Economic Sectors, The Economy of East Java

Introduction

Economic development is an effort to grow and change that is planned and implemented consciously by the state, state, and government towards modernity in the framework of national development (Agyemang et al., 2019; Wang et al., 2019). Economic development is a process of change in which there is an increase in people's living standards, adequate employment, equitable income distribution, and

increasing regional economic interaction (Sabirov et al., 2021; Luthra et al., 2020). Economic development is not only a national goal, but also local governments, especially since the central government implemented the concept of decentralization (Leasiwal et al., 2022). Regional economic development is inseparable from economic growth. The economic growth rate indicates the success of a region's economic development (Tortorella et al., 2019;

How to cite:

Sutrisno (2023). Analysis of Leading Sectors in Improving the Economy East Java Province in 2016-2020. *International Journal of Multidisciplinary: Applied Business and Education Research*. 4(1), 305 – 311. doi: 10.11594/ijmaber.04.01.29

Rajput & Singh, 2019). The implementation of decentralization gives local governments the authority to take care of their

internal affairs based on the Local Government Law Number 32 of 2004 (Farmery et al., 2021).

Table 1. Distribution of GRDP Percentage on a Constant Price Basis 2010 According East Java Province Business Field 2016-2020 (percent)

Business Fields 17 Categories	2016	2017	2018	2019	2020
A. Agriculture, Forestry and Fisheries	11.72	11.29	10.48	10.05	10.39
B. Mining and Quarrying	5.34	5.44	5.28	5.08	4.99
C. Processing Industry	29.22	29.29	29.86	30.24	30.34
D. Procurement of Electricity and Gass	0.32	0.31	0.29	0.28	0.28
E. Water Procurement, waste management, waste, and recycling	0.10	0.10	0.10	0.10	0.10
F. Construction	9.06	9.18	9.28	9.32	9.23
G. Large trade and retail, repair and maintenance of automobiles and motorcycles	18.29	18.43	18.56	18.64	18.00
H. Transportation and warehousing	2.93	2.96	2.99	2.94	2.67
I. Provision of Accommodation and Food and Drinks	5.22	5.34	5.45	5.56	5.19
J. Information and Communication	5.64	5.71	5.78	5.88	6.62
K. Financial Services and Insurance	2.64	2.57	2.55	2.51	2.57
L. Real estate	1.73	1.70	1.72	1.72	1.84
M, N Corporate Services	0.77	0.77	0.79	0.80	0.76
O. Government Administration, Defense and Compulsory Social Security	2.25	2.18	2.16	2.12	2.16
P. Education Services	2.66	2.63	2.62	2.67	2.84
Q. Health Services and Social Activies	0.66	0.66	0.67	0.68	0.76
R, S, T, U. Other Services	1.44	1.43	1.42	1.43	1.27
Gross Regional Domestic Product	100.00	100.00	100.00	100.00	100.00

Based on the table above, it can be seen that the contribution of the economic sector to the GRDP of East Java from 2016-2019 has increased while in 2020 there has been a decline in several economic sectors (Litvinenko, 2020). This is caused by the COVID-19 outbreak that has occurred in Indonesia since the beginning of 2020. East Java's economic growth contracted by 2.39% (Gazzola et al., 2020;Randani

et al., 2022). Many sectors of the economy have been affected by the policies issued by the government to reduce the spread of covid-19, such as the mining and quarrying sector; construction; large and retail trade, repair and maintenance of cars and motorcycles; transportation and warehousing; accommodation and eating and drinking providers; corporate services; and other services (Wardani et al., 2022).

Table 2. Provinces with GRDP on the basis of the highest constant prices, 2020 (Billion Rupiah)

Provinces	2020
DKI Jakarta	1.792.795
East Java	1.610.420
West Java	1.455.235
Central Java	965.629
North Sumatra	533.746

Based on table 2, East Java occupies the second position as the province with the largest GRDP after DKI Jakarta province despite the slowdown in economic growth. This shows that the government is trying to continue to help the economy of East Java to survive in the conditions of the Covid-19 pandemic. Balanced economic development, namely development potential is fulfilled in accordance with the development capabilities of each diverse region (Yadav, Luthra, Jakhar, et al., 2020). So there is a need for cooperation by local governments and the community by utilizing all existing resources and designing regional economic development (Yadav, Luthra, Husingh, et al., 2020;Roidah et al., 2022).

The leading sector also has a relatively large added value and production, a large multiplier effect value on other economies, as well as a high demand for products both in the local market and the exporter market (Sakti & Maudita, 2022;Widyaningsih & Arif, 2022). Limited resources must be followed by appropriate government policies so that the potential of the economic sector can be developed and produce a large contribution to GRDP (Ratnasari et al., 2022; Hasibuan et al., 2021). East Java is a province that has a major influence on national GDP, therefore it is necessary to know which economic sectors can survive and be redeveloped so that the economy of East Java can return to stability as before the

Covid-19 pandemic occurred (Widyastuti & Nusantara, 2022;Oktaviani, 2021).

Methods

This research approach is a quantitative research. Quantitative research methods can be interpreted as research method based on the philosophy of positivism, used to examine certain populations or samples, collect data using research instruments, analyze quantitative/statistical data with the aim of testing predetermined hypotheses. This research uses variables, namely the economic sector. The variable economic sector to determine the base and non-base sectors is to use GRDP data based on business fields on the basis of constant prices in 2016-2020, East Java Province. The data collection methods used are documentation and literature studies. The data analysis techniques used are Location Quotient (LQ) and Dynamic Location Quotient (DLQ) (Leasiwal et al., 2022).

Results and Discussion

Economic growth in East Java is classified as volatile where it always increases every year. East Java is also the second largest contributor after DKI Jakarta Province to the national GDP. However, the Covid-19 pandemic really paralyzed the economy of East Java until it contracted by -2.39 percent. The following is the growth rate of GRDP of East Java Province in 2016-2020.

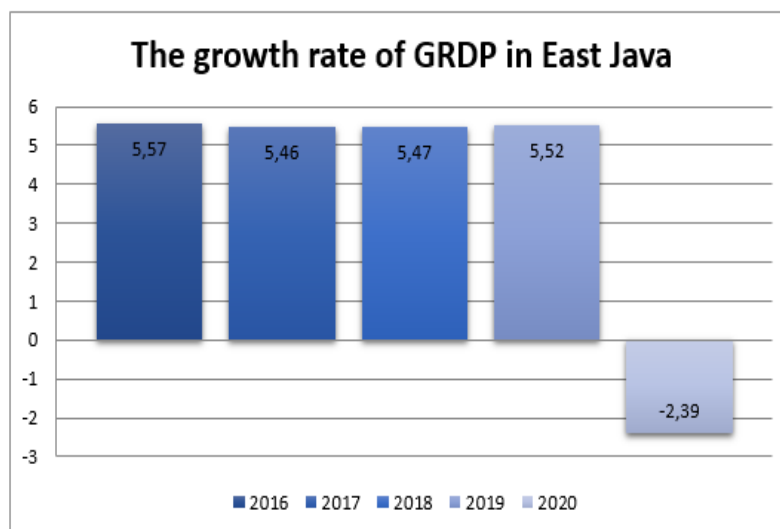


Figure 1. The growth rate of GRDP in East Java Province in 2016-2020 (percent)

Based on the chart above, it is known that east Java's GRDP growth contracted by -2.39 percent, which is certain that there was a shift

in the economic structure in the GRDP before the pandemic and during the Covid-19 pandemic.

Table 3. Results of Location Quotient Analysis of East Java Province Before and During the Covid-19 Pandemic

No.	Sectors	Before Pandemic	Result	During Pandemic	Result
1	Agriculture, Forestry and Fisheries	0.83	NB	0.76	NB
2	Mining and Quarrying	0.70	NB	0.77	NB
3	Processing Industry	1.48	B	1.53	B
4	Procurement of Electricity and Gass	0.25	NB	0.24	NB
5	Water Procurement, waste management, waste, and recycling	1.40	B	1.41	B
6	Construction	0.88	NB	0.86	NB
7	Large trade and retail, repair and maintenance of automobiles and motorcycles	1.42	B	1.39	B
8	Transportation and warehousing	0.55	NB	0.60	NB
9	Provision of Accommodation and Food and Drinks	1.90	B	2.03	B
10	Information and Communication	1.52	B	1.47	B
11	Financial Services and Insurance	0.61	NB	0.57	NB
12	Real estate	0.62	NB	0.62	NB
13	Corporate Services	0.44	NB	0.40	NB
14	Government Administration, Defense and Compulsory Social Security	0.59	NB	0.57	NB
15	Education Services	0.80	NB	0.80	NB
16	Health Services and Social Activies	0.62	NB	0.58	NB
17	Other Services	0.80	NB	0.65	NB

Based on the table of the results of the location quotient analysis above, it is known that there are 5 economic sectors that are the base sector of East Java Province. The sectors that have an LQ value of > 1 are (1) the manufacturing industry sector; (2) the water procurement, waste management, waste, and recycling sectors; (3) the large trade and retail sectors, repair and maintenance of automobiles and motorcycles; (4) the accommodation and food and beverage supply sector, and (5) the information and communication sector (Girik Allo et al., 2022). Meanwhile the other 12 sectors are included in the non-base sector or

those with an LQ value of < 1 , consisting of (1) the agriculture, forestry, and fisheries sectors; (2) the mining and quarrying sector; (3) the electricity and gas procurement sector; (4) the construction sector; (5) the transportation and warehousing sector; (6) the financial services and insurance sectors; (7) the real estate sector; (8) the company's service sector; (9) the government administration, land, and compulsory social security sectors; (10) the education service sector; (11) the health services sector and social activities; and (12) other service sectors (Saputra et al., 2022).

Table 4. Results of the Dynamic Location Quotient Analysis of East Java Province in 2016-2020

No.	Sectors	DLQ	Result
1	Agriculture, Forestry and Fisheries	0,01	No Potential
2	Mining and Quarrying	22,70	Potential
3	Processing Industry	4,29	Potential
4	Procurement of Electricity and Gass	0,00	No Potential
5	Water Procurement, waste management, waste, and recycling	3,78	Potential
6	Construction	0,75	No Potential
7	Large trade and retail, repair and maintenance of automobiles and motorcycles	1,23	Potensial
8	Transportation and warehousing	0,47	No Potential
9	Provision of Accommodation and Food and Drinks	26,76	Potential
10	Information and Communication	1,06	Potential
11	Financial Services and Insurance	0,17	No Potential
12	Real estate	1,85	Potential
13	Corporate Services	0,09	No Potential
14	Government Administration, Defense and Compulsory Social Security	0,54	No Potential
15	Education Services	1,66	Potential
16	Health Services and Social Activies	1,10	Potential
17	Other Services	0,00	No Potential

Based on the results of the dynamic location quotient analysis above, it can be concluded that in 2016-2020 there were 9 economic sectors that were included in the category of potential sectors to be developed, where this sector had faster growth. These sectors are (1) the mining and quarrying sector; (2) the manufacturing sector; (3) the water procurement, waste management, waste, and recycling sectors; (4) large trade and retail sectors. Repair and maintenance of cars and motorcycles; (5) the accommodation and drinking food supply sector; (6) the information and communication sector; (7) the real estate sector; (8) the education services sector; and (9) the health services sector and social activities (Arisanti et al., 2023).

While the other 8 sectors are included in the group of sectors with no potential for development because growth is slower. These economic sectors are, namely, (1) the agriculture, forestry, and fisheries sectors; (2) the electricity and gas procurement sector; (3) the construction sector; (4) the transportation and warehousing sector; (5) the financial services and insurance sectors; (6) the company's service sector; (7) the government

administration, defense and social security services sectors; (8) other service sectors (Prastiwi & Arisetyawan, 2022).

Before and after the Covid-19 pandemic, the economic sectors that became the base sector in East Java Province were (1) the processing industry sector; (2) the water procurement, waste management, waste, and recycling sectors; (3) the large trade and retail sectors, repair and maintenance of automobiles and motorcycles; (4) the accommodation and food and beverage supply sector, and (5) the information and communication sector (Silvia Mayningrum & Kamil Muhtadi, 2021). Although there was no shift in the structure of the economy, there was a slowdown in almost all sectors of the economy (Laksana & Muchlish Al Rahmat, 2022). As a result of the government's policy on large-scale social restrictions, it has an impact on the paralysis of economic activities which has caused a decrease in the contribution of each economic sector to the GRDP of East Java Province.

Conclusion

Economic sectors that are included in the base sector need more attention and

improvement as an effort to increase economic growth in East Java. Especially in the processing industry sector which contributes the most to the GRDP of East Java. It needs attention and improvement so that it can increase people's income and employment. Efforts to improve the non-base sector can be done by optimizing the potential of resources and promoting regional brand image so that it can attract investors and form a pattern of partnership and cooperation with the private sector.

References

- Agyemang, M., Kusi-Sarpong, S., Khan, S. A., Mani, V., Rehman, S. T., & Kusi-Sarpong, H. (2019). Drivers and barriers to circular economy implementation. *Management Decision*, 57(4), 971–994. <https://doi.org/10.1108/MD-11-2018-1178>
- Arisanti, R., Utami, E. R., Muslim, A., & Hayati, M. (2023). The relationship between economic growth and e-commerce at the beginning of covid-19 pandemic in east Java. *Decision Science Letters*, 12(1), 149–162. <https://doi.org/10.5267/j.dsl.2022.9.002>
- Farmery, A. K., White, A., & Allison, E. H. (2021). Identifying Policy Best-Practices to Support the Contribution of Aquatic Foods to Food and Nutrition Security. *Foods*, 10(7), 1589. <https://doi.org/10.3390/foods10071589>
- Gazzola, P., Pavione, E., Pezzetti, R., & Grechi, D. (2020). Trends in the Fashion Industry. The Perception of Sustainability and Circular Economy: A Gender/Generation Quantitative Approach. *Sustainability*, 12(7), 2809. <https://doi.org/10.3390/su12072809>
- Girik Allo, A., Dwiputri, I. N., & Maspaitella, M. (2022). The impact of electricity investment on inter-regional economic development in Indonesia: An Inter-Regional Input-Output (IRIO) approach. *Journal of Socioeconomics and Development*, 5(1), 1. <https://doi.org/10.31328/jsed.v5i1.2775>
- Hasibuan, L. S., Hariani, P., & Pratiwi, A. S. (2021). Poverty Development Post Fiscal Decentralization Policy In Otsus Fund Receiving Province In Indonesia (Case Study: Province Of Papua, West Papua, And Aceh). *International Journal of Economic, Technology and Social Sciences (Injects)*, 2(2), 562–574. <https://doi.org/https://doi.org/10.53695/injects.v2i2.598>
- Laksana, S., & Muchlish Al Rahmat, A. (2022). How to Cope With Strategic Infrastructure Disparities in West Java? (A Post-Pandemic Economic Recovery Analysis). *The Journal of Indonesia Sustainable Development Planning*, 3(3), 222–245. <https://doi.org/10.46456/jisdep.v3i3.353>
- Leasiwal, T. C., Payapo, R. W., Oppier, H., & Setya, D. (2022). Analysis of Income Disparities between Regions in the Western Region of Indonesia and the Eastern Region of Indonesia. *International Journal of Science and Society*, 4(4), 638–656. <https://doi.org/10.54783/ijssoc.v4i4.612>
- Litvinenko, V. S. (2020). Digital Economy as a Factor in the Technological Development of the Mineral Sector. *Natural Resources Research*, 29(3), 1521–1541. <https://doi.org/10.1007/s11053-019-09568-4>
- Luthra, S., Kumar, A., Zavadskas, E. K., Mangla, S. K., & Garza-Reyes, J. A. (2020). Industry 4.0 as an enabler of sustainability diffusion in supply chain: an analysis of influential strength of drivers in an emerging economy. *International Journal of Production Research*, 58(5), 1505–1521. <https://doi.org/10.1080/00207543.2019.1660828>
- Oktaviani, D. (2021). The Impact of Covid-19 Pandemic on Regional Economy: Supply-Driven Interregional Input-Output (IRIO) Approach for East Java Province. *East Java Economic Journal*, 5(2), 225–250. <https://doi.org/10.53572/ejavec.v5i2.72>
- Prastiwi, L. F., & Arisetyawan, K. (2022). Industrial Agglomeration: Industrialization Of North-South In East Java Corridors. *EcceS (Economics, Social, and Development Studies)*, 9(1), 42–64. <https://doi.org/10.24252/ecc.v9i1.28287>
- Rajput, S., & Singh, S. P. (2019). Connecting circular economy and industry 4.0. *International Journal of Information Management*, 49, 98–113. <https://doi.org/10.1016/j.ijinfomgt.2019.03.002>
- Randani, A. I., Baliwati, Y. F., Sukandar, D., & Tanzaha, I. (2022). Economic and Consumption Variables and Their Associations with Stunting Prevalence: A Provincial Analysis of the Indonesian Child Nutritional Status Survey 2019. *Jurnal Gizi Dan Pangan*, 17(1), 57–66. <https://doi.org/10.25182/jgp.2022.17.1.57-66>
- Ratnasari, N. E., Ningrum, S., Susanti, E., & Ginting, N. M. (2022). Rethinking Strategies To Improve Economic Development In Bandung Regency. *Economics Development Analysis Journal*, 11(3), 354–369.

- <https://doi.org/https://doi.org/10.15294/edaj.v1i13.61199>
- Roidah, I. S., Setiawati, E., & Laily, D. W. (2022). The linkage among the agribusiness system cassava industrialization in trenggalek regency, east java, indonesia. *IOP Conference Series: Earth and Environmental Science*, 1005(1), 012024. <https://doi.org/10.1088/1755-1315/1005/1/012024>
- Sabirov, O. S., Suyunov, Y. B., Aslonov, A. F. O., Subhonov, M. R. O., & Kamilov, A. Q. O. (2021). Improvement of Ways to Develop the Textile Industry on the Basis of Resource-Technology. *International Journal of Modern Agriculture*, 10(2), 1868–1877.
- Sakti, R. K., & Maudita, A. V. (2022). Measuring Spatial Disparity in East Java: A Convergence Analysis. *Jurnal Ekonomi Pembangunan: Kajian Masalah Ekonomi Dan Pembangunan*, 23(2), 229–240. <https://doi.org/10.23917/jep.v23i2.15452>
- Saputra, Z., Sartiyah, S., & Seftarita, C. (2022). The Impact of Tourism on Economic Growth: Evidence from Aceh Province, Indonesia. *International Journal of Global Optimization and Its Application*, 1(3), 223–228. <https://doi.org/10.56225/ijgoia.v1i3.74>
- Silvia Mayningrum, & Kamil Muhtadi. (2021). i-SMARTS: Digitalization of Agrotechnopreneurship-Based MSME Development to Support Acceleration of East Java Economic Recovery in The Middle of The Covid-19 Pandemic. *East Java Economic Journal*, 5(1), 1–26. <https://doi.org/10.53572/ejavec.v5i1.56>
- Tortorella, G. L., Giglio, R., & van Dun, D. H. (2019). Industry 4.0 adoption as a moderator of the impact of lean production practices on operational performance improvement. *International Journal of Operations & Production Management*, 39(6/7/8), 860–886. <https://doi.org/10.1108/IJOPM-01-2019-0005>
- Wang, C., Ghadimi, P., Lim, M. K., & Tseng, M.-L. (2019). A literature review of sustainable consumption and production: A comparative analysis in developed and developing economies. *Journal of Cleaner Production*, 206, 741–754. <https://doi.org/10.1016/j.jclepro.2018.09.172>
- Wardani, V. K., Nasikh, N., & Agustin, G. (2022). The Effect of MSME Development on GRDP in East Java Post-Pandemi Covid-19. *BINA BANGSA INTERNATIONAL JOURNAL OF BUSINESS AND MANAGEMENT*, 2(3), 600–609. <https://doi.org/https://doi.org/10.46306/bbijbm.v2i3.76>
- Widyaningsih, A. H., & Arif, M. (2022). Panel Data Analysis of Government Policy on Human Development Index in Central Java Province. *International Conference on Economics and Business Studies (ICOEBS 2022)*, 396–403. <https://doi.org/10.2991/aebmr.k.220602.052>
- Widyastuti, A., & Nusantara, A. (2022). Does Fiscal Decentralization Affect Poverty? An Empirical Study. *Economics Development Analysis Journal*, 11(3), 305–312. <https://doi.org/https://doi.org/10.15294/edaj.v1i13.56912>
- Yadav, G., Luthra, S., Huisingh, D., Mangla, S. K., Narkhede, B. E., & Liu, Y. (2020). Development of a lean manufacturing framework to enhance its adoption within manufacturing companies in developing economies. *Journal of Cleaner Production*, 245, 118726. <https://doi.org/10.1016/j.jclepro.2019.118726>
- Yadav, G., Luthra, S., Jakhar, S. K., Mangla, S. K., & Rai, D. P. (2020). A framework to overcome sustainable supply chain challenges through solution measures of industry 4.0 and circular economy: An automotive case. *Journal of Cleaner Production*, 254, 120112. <https://doi.org/10.1016/j.jclepro.2020.120112>