



**SURAT PENUGASAN**  
Nomor : ST/458/X/2022/FEB-UBJ

Tentang

**PENUGASAN DOSEN SEBAGAI PENULIS JURNAL**

**FAKULTAS EKONOMI DAN BISNIS**  
**UNIVERSITAS BHAYANGKARA JAKARTA RAYA**

Pertimbangan : Sehubungan dengan Penugasan dosen dalam Penulis Jurnal yang dilakukan Dosen Fakultas Ekonomi dan Bisnis Universitas Bhayangkara Jakarta Raya semester Ganjil TA. 2022/2023. Dipandang perlu penugasan Dosen Tetap Fakultas Ekonomi dan Bisnis untuk melaksanakan kegiatan yang dimaksud. Untuk itu perlu mengeluarkan Surat Tugas.

Dasar : a. UU RI No.12 Tahun 2012 tanggal 10 Agustus 2012 tentang Pendidikan Tinggi.  
b. Peraturan Menteri Riset Teknologi dan Pendidikan Tinggi No. 08 tahun 2019 tentang Standar Pelayanan Minimum.  
c. Keputusan Kepala Kepolisian Republik Indonesia selaku Ketua Umum Yayasan Brata Bhakti Polri No. Pol : KEP/05/IX/1995/YBB tanggal 18 September 1995 tentang Pembentukan dan Pendirian Universitas Bhayangkara Jakarta Raya.  
d. Surat Keputusan Ketua Pengurus Yayasan Brata Bhakti Nomor: Skep/52/VIII/2020/YBB tanggal 13 Agustus 2020 tentang Pengangkatan dalam Jabatan Dekan di Lingkungan Universitas Bhayangkara Jakarta Raya.  
e. Surat Keputusan Rektor Universitas Bhayangkara Jakarta Raya Nomor: SKEP/176/VIII/2022/UBJ tanggal 02 Agustus 2022 tentang Kalender Akademik Semester Ganjil dan Genap Tahun Akademik 2022/2023.

**DITUGASKAN**

Kepada : 1. Nama : Choiroel Woestho, S.E., M.E.<sup>1</sup>  
NIDN : 0325068506  
Jabatan : Dosen Tetap Prodi Manajemen

2. Nama : Adi Wibowo Noor Fikri, S.Kom., MBA<sup>2</sup>  
NIDN : 0325027901  
Jabatan : Dosen Tetap Prodi Manajemen

3. Nama : Dr. Dhian Tyas Untari, S.E. M.M., MBA., CRA.<sup>3</sup>  
NIDN : 0309048105  
Jabatan : Dosen Tetap Prodi Manajemen

SURAT PENUGASAN  
DEKAN FAKULTAS EKONOMI DAN BISNIS  
NOMOR : ST/458/X/2022/FEB-UBJ  
TANGGAL : 10 OKTOBER 2022

Untuk

- :
1. Melaksanakan tugas sebagai Penulis pada (APJBET) *Asia Pacific Journal of Business Economics and Technology* dengan Judul "**Analysis of Leading Sector Clusters in Regencies / Cities in The Province of Yogyakarta Special Region for The Period 2017 - 2021**" yang telah terbit pada Volume 02, Issue 05, ISSN: 2809-2279, Oktober 2022.
  2. Melaporkan hasil pelaksanaan kegiatan tersebut secara tertulis kepada Dekan Fakultas Ekonomi dan Bisnis.
  3. Melaksanakan tugas ini dengan penuh tanggung jawab.

Dikeluarkan di : Jakarta

Pada Tanggal : 10 Oktober 2022

An. DEKAN FAKULTAS EKONOMI DAN BISNIS  
WADEK II



Dr. Wastan Wahyu Hidayat, S.E., M.M.  
NIP : 1802324

Tembusan:  
- Arsip

Date : 10/06/2022

Ref : Apjbet\_October\_2022\_0088

Jurnal Name : Asia Pacific Journal of Business Economics and Technology ( APJBET)

ISSN : 2809 – 2279

Manuscript Title:

### **ANALYSIS OF LEADING SECTOR CLUSTERS IN REGENCIES / CITIES IN THE PROVINCE OF YOGYAKARTA SPECIAL REGION FOR THE PERIOD 2017 - 2021**

By

**Choiroel Woestho<sup>1\*</sup>, Adi Wibowo Noor Fikri<sup>2</sup>, Dhian Tyas Untari<sup>3</sup>**

<sup>1,2,3</sup> Bhayangkara Jakarta Raya University

*Corresponding author-email: [choiroel@dsn.ubharajaya.ac.id](mailto:choiroel@dsn.ubharajaya.ac.id)*

Has been accepted for publication in the forthcoming issue of **Asia Pacific Journal of Business Economics and Technology ( APJBET)**

|                 |                              |                     |
|-----------------|------------------------------|---------------------|
| <b>ACCEPTED</b> | <del>REVISION REQUIRED</del> | <del>REJECTED</del> |
|-----------------|------------------------------|---------------------|

With Warm Regards,

**DIAN CITANINGTYAS**

**Editor -in- Chief  
Dian Citaningtyas A.K**

**Cita Konsultindo Research Center**  
Raya Solo 11 SuratmajanMaospati, East Java Indonesia,63392  
Email :[editor.apjbet@gmail.com](mailto:editor.apjbet@gmail.com)  
**+628563636289**

---

## ANALYSIS OF LEADING SECTOR CLUSTERS IN REGENCIES / CITIES IN THE PROVINCE OF YOGYAKARTA SPECIAL REGION FOR THE PERIOD 2017 - 2021

Choiroel Woestho<sup>1\*</sup>, Adi Wibowo Noor Fikri<sup>2</sup>, Dhian Tyas Untari<sup>3</sup>

<sup>1</sup> Bhayangkara Jakarta Raya University

<sup>2</sup> Bhayangkara Jakarta Raya University

<sup>3</sup> Bhayangkara Jakarta Raya University

Corresponding author-email: <sup>1\*</sup>[choiroel@dsn.ubharajaya.ac.id](mailto:choiroel@dsn.ubharajaya.ac.id)

### ABSTRACT

*Development in an area aims to address inequality – inequality that can increase poverty in the region. One of the things that can be done by local governments is to recognize the potential of the main sectors that are superior in their regions so that they can encourage and increase economic growth which ultimately improves the welfare of the community. This study aims to identify the leading sectors in the Regencies/Cities, Provinces of the Special Region of Yogyakarta by using secondary data, namely the Gross Regional Domestic Product (GDRP) production method for the period 2017 - 2021 obtained from the Central Regional Statistics Agency. The analysis used is the location quotient method and the regional specialization method. The results obtained are varied where each regency / city has its own superior sector. Kulonprogo Regency with Mining and Quarrying, Bantul Regency, Processing Industry sector, Gunungkidul Regency with Mining and Quarrying sector, Sleman Regency for Corporate Services sector and Yogyakarta City with Financial Services and Insurance sector. As for the analysis of regional specialties, there is no inter-district / city sector specialization. This is because the sector value between the Regency / City and the provincial sector value is close to zero.*

*Keywords: GDRP, Leading Sectors, Location Quotient, Specialization Index*

### 1. Introduction

Development is a dynamic concept by looking at a relentless business activity to realize a just and prosperous society. As a dynamic concept, economic development means creating sustainable change in every aspect of people's lives. The purpose of development is to improve the standard of living of the community relatively and realize a just, prosperous and prosperous society (Yuniarti et al., 2020).

As a rule, the development process can only be seen as the result of the growth of a country's economy, not just a mere economic phenomenon. In addition, economic development has a broad perspective that leads to better conditions through measurable and targeted planning. (Todaro & Smith, 2020) defines economic development as a multidimensional process with significant changes, both in economic



structure and social change, reduction of poverty, inequality and unemployment in the context of economic growth.

Economic development requires not only an increase in national income but also sustainable growth. The most basic question is not only how the national income grows, but who grows it. If growth occurs due to some rich people, then it can be said that growth is more profitable for the rich and takes a long time to achieve income equality (Wulandari & Sakti, 2020).

For this reason, economic development is very multidimensional and variegated by taking into account the substance, characteristics and objectives of economic development itself (Lee, 2020). The main indicators of economic development are economic growth that takes into account the level of poverty, income inequality, and the development of the unemployment rate. (Brinkmann, 2018). Economic development ultimately leads to an increase in the real per capita income of the population of a territory, unless the number of residents below the absolute poverty line increases and the income distribution is too high. (Hardiani & Lubis, 2017).

The basic criterion of economic development is to calculate economic growth which measures the value of gross national product (GNP) and gross domestic product (GDP). Gross national product is the total amount of goods and services produced by individuals and companies of a region located in its own territory and abroad, while gross domestic product (2015) is the total value of goods and services produced in a region over a certain period of time, taking into account the ownership of factors of production (Edwards, 2015).

Gross domestic product (GDP) is the most complex and representative indicator calculated at the macroeconomic level and most accurately reflects the results obtained throughout the year. It is used not only for static and dynamic analysis, but also for international comparisons. By analyzing resources and usage, it will get meaningful data on economic opportunities, growth, and development. In its development, this indicator offers the potential to increase income per population, which is an aspect of the country's population that leads to an assessment of the standard of living and quality of life when compared with demographic indicators (Anghelache et al., 2020).

Gross domestic product can be calculated on a monthly, quarterly, and annual basis. The calculation of GDP is carried out with the aim of medium-term and long-term analysis so that useful data are obtained for strategic economic policy making. GDP can be calculated on the basis of constant prices and nominal prices. Calculating GDP using market prices is the final result of the activity of economic actors over a certain period of time. Market price GDP is calculated using two methods, namely the production method and the expenditure method.

The expenditure method is calculated on the basis of increasing the level of consumption, the formation of gross fixed capital, government expenditures as well as exports and imports of goods and services. Meanwhile, GDP by the income method assesses income earned from wages, net income from rent, income from interest and income from the profits of companies and individuals.

In addition to these two methods, GDP with the production method is used to calculate the added value generated by the industrial sector so that it can be known which sector is the economic base of a region.



Yogyakarta Special Region Province (D.I. Yogyakarta) is an area with massive development in the south of Java island, where there are four regencies and one city, each of which has good economic potential according to the circumstances of the region so that it has a different growth rate, economic sector and GRDP.

**Table 1. Gross Regional Domestic Product Value and Economic Growth Rate By Regency / City in Yogyakarta Special Region Province On The Basis Of Constant Prices**

| Area                  | GRDP in 2019   | Percentage | GRDP in 2021   | Percentage | Growth Rate |
|-----------------------|----------------|------------|----------------|------------|-------------|
|                       | (Billion Rp)   | (%)        | (Billion Rp)   | (%)        | (%)         |
| Kulonprogo District   | IDR 8,770.75   | 8,59%      | IDR 8,778.80   | 8,32%      | 0,09%       |
| Bantul County         | IDR 19,154.76  | 18,76%     | IDR 19,773.33  | 18,73%     | 3,23%       |
| Gunungkidul Regency   | IDR 13,605.07  | 13,32%     | IDR 14,216.36  | 13,47%     | 4,49%       |
| Sleman County         | IDR 35,289.80  | 34,56%     | IDR 36,786.97  | 34,85%     | 4,24%       |
| Yogyakarta City       | IDR 25,285.22  | 24,76%     | IDR 26,003.69  | 24,63%     | 2,84%       |
| Prov. D.I. Yogyakarta | IDR 102,105.60 | 100%       | IDR 105,559.15 | 100%       | 3,38%       |

Source : Central Bureau of Statistics regencies / cities in D.I. Yogyakarta province.

Problems in regional development in D.I. Yogyakarta province is the absence of data on the base of leading sectors. Of the various sectors contained in the calculation of GRDP, the business field method, of course, not all can be run properly.

From this description, the researcher wants to focus on knowing the potential and identifying the leading economic sectors in the Regency / City located in the D.I. Yogyakarta area so that it can be used as input in formulating development planning and implementation that can ultimately increase economic growth. The researcher took the research title "Analysis of Leading Sector Clusters in regencies / cities of the Yogyakarta Special Region Province".

## 2. Literature Review

Economic growth is one of the indicators used to measure the level of welfare of people in a region. A region experiences economic growth if there is a measurable increase in production of all economic activities within its territory. For decades, regional development has always sought to obtain high economic growth, regardless of whether such growth is beneficial to the welfare of the population equally or not. Further developments, regional development policy makers began to take into account the benefits of economic growth for the community, so that the level of equity began to become an indicator for welfare (Badrudin, 2012).

Quality economic growth is economic growth that is oriented towards job creation and can reduce poverty. High economic growth is expected to expand employment opportunities so that it can absorb labor in a sustainable manner. Wider employment opportunities will increase labor absorption, which is an important factor in efforts to reduce the poverty rate. In addition, high economic growth can be an indicator of higher incomes of the people so that the poverty rate becomes less and less (Woestho et al., 2021).

The rate of economic growth is the process of increasing per capita output in the long term. The term process means that it contains elements of dynamics, change, or development. Therefore, economic growth is usually seen over a period of time. The rate of economic growth associated with the GRDP per capita of a region, can be used to compare regions in absolute terms (Woestho et al., 2020).

The leading sector is the sector influenced by the existence of an endowment factor, which then this factor can develop with the presence of investment activities and become the foundation in the development of the economy. The investment criteria for leading sectors vary, this criterion is assessed on the basis of the role of the sector has a high growth rate, then the sector is able to absorb a relatively large workforce and has a high relationship with other sectors and creates great added value (Arifien et al., 2012).

Economic growth as a quantitative measure that explains the development of the economy in a certain period compared with previous periods. There are other factors determining economic growth such as natural wealth, the amount and quality of labor, capital goods and the level of technology and social systems (Sukirno, 2015). The movement of the value rate is formed indirectly from several sectors / fields of the economy which can interpret the pace of movement that occurs is an indication of economic growth. In addition, economic growth is an important parameter of a region to evaluate a success rate of development (Falianty, 2019).

Regional economic growth is highly dependent on external demand from outside the region. The growth of some base sectors will determine the overall regional development, while the non-base sector is only a consequence of regional development. Goods and services from the exported base sector will generate income for the regions as well as increase consumption and investment. The increase in income will not only lead to an increase in demand for the base sector, but will also increase the demand for the non-base sector, which in turn will encourage an increase in investment in the non-base sector (Sjafrizal, 2018).

The calculation of GRDP is a very important part of macroeconomic theory. GRDP can be interpreted as the amount of added value that can be generated by all economic units located in a region. In assessing the leading sectors in an area, you can use the GRDP expenditure method which calculates the added value of economic actors in an area. Meanwhile, the GRDP business field method is used to measure the added value generated by various industrial sectors in an area.

The use of GRDP business field method is suitable for use in determining the industrial sector in an area. This is to determine the extent to which the industrial sector in the region is experiencing growth or not, so that in the end it can be determined the right decision making to improve the industrial sector. In calculating the GRDP, the business field method to be more effective, it uses the calculation of GRDP on the basis of constant prices, namely by comparing the prices in force in a given year with the year set as the basis for measurement. This article will further examine the extent of the industrial sector that exists in the Regency / City of D.I. Yogyakarta province can increase economic growth.

### 3. Research Methods

The data used in this study is skunder data obtained from related agencies. The data is a time series data for the last 5 years consisting of industrial sectors in the Gross Regional Domestic Product (GRDP) of the Regency / City business field method in the Province of the Special Region of Yogyakarta.

#### a. Location Quotient Analysis

LQ analysis of a particular sector is carried out by comparing the share of a particular sector - either by using the value of output or the number of workers - against its total at the regional/local level with the share of that same sector against its total at the national level (often referred to as the reference area, i.e. the area larger than the analyzed region/local or supra-region).

The formula, for example by using the output value, is as follows:

$$Location\ Quotient = \frac{SiR/SR}{SiN/SN}$$

Information:

SiR : The amount of GRDP in sector i in the Regency/City area

SR : Total amount of GRDP in regencies/cities

SiN : The amount of GRDP sector i in the Province area

SN : The amount of GRDP in the Province

There are three conditions that can be characterized in calculations using *location quotient* analysis, namely:

- a) If the value of  $> 1$ , indicates that the sector, in addition to being able to meet its own needs, also provides opportunities for export to other regions. It can also be said that the region is specialized in the sector in question (the sector is the base sector).
- b) If the value  $= 1$ , indicates the sector can only meet the needs of the region itself. Or in other words, the sector in question in the area has the same level of specialization compared to the same sector in the national area.
- c) If the value of the  $< 1$ , it indicates that the sector does not adequately meet the needs of its own territory, so the region must import from other regions. It can also be said that the region is not specialized in the sector in question (the sector is a non-base sector).

#### b. Regional Specialization Analysis

The use of regional specialization index analysis tools is to find out the level of specialization between regions in an economic system. Analysis of the regional specialization index was carried out using the Krugman Index to analyze regional specialties in the territory of the United States. The calculation model using the Krugman Index is as follows:

$$SIjk = \sum_{i=1}^n \left| \left( \frac{Eij}{Ej} \right) - \left( \frac{Eik}{Ek} \right) \right|$$



Information:

- Sljk : Specialization index of Regions J and K
- Eij : GRDP sector i in Region J
- Ej : Total GRDP of Region J
- Eik : GRDP sector i in Region K
- Ek : Total GRDP of K Region

The measurement criteria are that if the regional specialization index is close to zero, then both regions j and k have no specialization, and when the regional specialization index approaches the value of two then both regions j and k have specialization. The middle boundary between zero and two is one, and therefore if a sector has a regional specialization index value greater than one then the sector can be considered a sector that has a specialization. To see the high level of specialization of one region against other regions, the average value of the regional specialization index of each region is used as a comparison. If the analysis uses time series data, the increase in the value of the regional specialization index shows the increasingly specialized sector / business field between the regions concerned.

#### 4. Results and Discussion

##### a. Location Quotient Analysis

LQ analysis is basically used to find out which sector is the basis of the economy in a region. Basically, LQ analysis is an analysis in knowing the position of an area whether it has *net importer* potential or as a *net exporter* of a certain product or sector, by comparing its production and consumption (Basuki & Mujiraharjo, 2017). The LQ analysis of regencies/cities in D.I. Yogyakarta Province is presented in Table 2 below.

**Table 2. Results of Location Quotient Analysis of Regencies/Cities in D.I. Yogyakarta Province**

| District/City<br>Sector                                  | Kulonprogo | Bantul | Gunungkidul | Sleman | Yogyakarta City |
|--|------------|--------|-------------|--------|-----------------|
| Agriculture, Forestry, and Fisheries                     | 1,30       | 0,99   | 1,81        | 0,55   | 1,08            |
| Mining and Quarrying                                     | 2,69       | 0,91   | 2,22        | 0,63   | 0,48            |
| Processing Industry                                      | 0,99       | 1,21   | 0,77        | 1,04   | 0,93            |
| Electricity and Gas Procurement                          | 0,64       | 1,09   | 0,69        | 0,84   | 1,36            |
| Water Procurement, Waste Management, Waste and Recycling | 1,31       | 0,86   | 1,67        | 0,48   | 1,29            |
| Construction   | 1,54       | 0,97   | 0,99        | 1,21   | 0,65            |

|   |      |      |      |      |      |
|---|------|------|------|------|------|
| Large Trade and Retail; Car and Motorcycle Repair                 | 1,65 | 1,07 | 1,20 | 0,94 | 0,76 |
| Transportation and Warehousing                                    | 1,68 | 1,00 | 1,03 | 1,12 | 0,67 |
| Provision of Accommodation and Drinking Meals                     | 0,40 | 1,21 | 0,66 | 1,07 | 1,10 |
| Information and Communication                                     | 0,57 | 0,97 | 0,92 | 1,02 | 1,15 |
| Financial Services and Insurance                                  | 0,77 | 0,77 | 0,61 | 0,86 | 1,52 |
| Real Estate   | 0,49 | 0,98 | 0,52 | 1,18 | 1,15 |
| Corporate Services  | 0,29 | 0,49 | 0,46 | 1,72 | 0,94 |
| Government Administration, Defense and Compulsory Social Security | 1,05 | 0,96 | 1,23 | 0,83 | 1,10 |
| Educational Services  | 0,70 | 0,87 | 0,79 | 1,21 | 1,02 |
| Health Services and Social Activities                             | 0,57 | 0,76 | 0,85 | 0,97 | 1,36 |
| Other Services  | 1,43 | 0,86 | 1,42 | 0,89 | 0,91 |

Source : Data processed, 2017 - 2021

Kulonprogo Regency with an area of 586.27 Km<sup>2</sup> has the highest LQ value in the mining and quarrying sector with a value of 2.69. The GRDP value in this sector is relatively low with an average of Rp. 126,187.62 billion when compared to other sectors. The LQ value of the mining and mining sector which is more than 1 (>1) means that this sector is a leading sector and has good prospects to improve the regional economy. Sequentially, sectors that have an LQ value of more than 1 are transportation and warehousing (1.68), Wholesale Trade and Retail; Car and Motorcycle Repair (1.65), Construction (1.54), Other Services (1.43), Water Procurement, Waste Management, Waste and Recycling (1.31), Agriculture, Forestry, and Fisheries (1.30) and Government Administration, Defense and Compulsory Social Security (1.05).

Bantul Regency, a sector that has an LQ value of more than 1 is the Processing Industry with a value of 1.21. The processing industry is the sector with the highest GRDP with a value of Rp. 2,561,718.28 billion compared to other sectors. In

addition to these sectors, the leading sectors are The Provision of Accommodation and Drinking Food (1.21), Procurement of Electricity and Gas (1.09) and Large Trade and Retail; Car and Motorcycle Repairs (1.07).

For Gunungkidul Regency, which is a leading sector and has the prospect of improving the regional economy with a high LQ value of more than 1, namely Mining and Quarrying of 2.22. Just like Kulonprogo Regency, the GRDP value of Gunungkidul Regency is low with a value of Rp. 167,046.12 billion. Successively, the leading sectors include Agriculture, Forestry, and Fisheries (1.81), Water Procurement, Waste Management, Waste and Recycling (1.67), Other Services (1.42), Government Administration, Defense and Compulsory Social Security (1.23), Large Trade and Retail; Car and Motorcycle Repair (1.20), and Transportation and Warehousing (1.03).

Sleman Regency, which is located in the north of D.I. Yogyakarta Province, the leading sector with an LQ value of more than 1 is the Corporate Services sector with a figure of 1.72 with an average GRDP value of Rp. 626,969.94 billion. This sector is very dependent on mobility and interaction between consumers and producers so that it has good prospects to continue to be developed. The next leading sectors of Sleman Regency are Education Services (1.21), Construction (1.21), Real Estate (1.18), Transportation and Warehousing (1.12), Accommodation and Food and Drink Provision (1.07), Processing Industry (1.04), and Information and Communication (1.02).

The last is the city of Yogyakarta, with an LQ value of 1.52 for the Financial Services and Insurance sector, making this sector a leading sector and has prospects to continue to be developed. The next sectors that have an LQ value of more than 1 in order are electricity and gas procurement (1.36), health services and social activities (1.36), water procurement, waste management, waste and recycling (1.29), information and communication (1.15), real estate (1.15), accommodation and food and drink provision (1.10), government administration, defense and compulsory social security (1.10), agriculture, forestry, and Fisheries (1.08), and Educational Services (1.02).

#### b. Regional Specialization Analysis

The regional specialization approach has a specialization when two regions have a value greater than one. Meanwhile, if the index is smaller than one, then the two regions are considered to have no specialization. The results of the analysis of the regional specialization index are presented in the following table 3.

**Table 3. Results of Regional Specialization Analysis of Regencies/Cities in D.I. Yogyakarta Province**

| District/City<br>Sector              | Kulonprogo | Bantul | Gunungkidul | Sleman | Yogyakarta City |
|--------------------------------------|------------|--------|-------------|--------|-----------------|
| Agriculture, Forestry, and Fisheries | 0,09       | 0,00   | 0,23        | 0,13   | 0,02            |

|   |      |      |      |      |      |
|---|------|------|------|------|------|
| Mining and Quarrying  | 0,02 | 0,00 | 0,02 | 0,01 | 0,01 |
| Processing Industry   | 0,01 | 0,06 | 0,07 | 0,01 | 0,02 |
| Electricity and Gas Procurement                                   | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 |
| Water Procurement, Waste Management, Waste and Recycling          | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 |
| Construction  | 0,13 | 0,01 | 0,01 | 0,05 | 0,09 |
| Large Trade and Retail; Car and Motorcycle Repair                 | 0,13 | 0,01 | 0,04 | 0,01 | 0,05 |
| Transportation and Warehousing                                    | 0,08 | 0,01 | 0,01 | 0,02 | 0,04 |
| Provision of Accommodation and Drinking Meals                     | 0,13 | 0,05 | 0,08 | 0,02 | 0,02 |
| Information and Communication                                     | 0,13 | 0,01 | 0,03 | 0,01 | 0,05 |
| Financial Services and Insurance                                  | 0,02 | 0,02 | 0,03 | 0,01 | 0,05 |
| Real Estate   | 0,09 | 0,00 | 0,08 | 0,03 | 0,03 |
| Corporate Services  | 0,02 | 0,01 | 0,01 | 0,02 | 0,00 |
| Government Administration, Defense and Compulsory Social Security | 0,01 | 0,01 | 0,04 | 0,03 | 0,02 |
| Educational Services  | 0,07 | 0,03 | 0,05 | 0,05 | 0,00 |
| Health Services and Social Activities                             | 0,03 | 0,02 | 0,01 | 0,00 | 0,02 |
| Other Services  | 0,03 | 0,01 | 0,03 | 0,01 | 0,01 |
| Average   | 0,06 | 0,02 | 0,04 | 0,02 | 0,02 |

Source : Data processed, 2017 - 2021

Table 3 shows the results of the analysis of regional specialization in sectors in regencies/cities in D.I. Yogyakarta Province in 2017 – 2021. Based on these results, results are obtained that all sectors have a specialization index that is close to zero. This shows that all regencies/cities in D.I. Yogyakarta Province do not have specific specialties.

## 5. Conclusion

Based on the results of the location quotient analysis in regencies/cities in D.I. Yogyakarta Province, it produces a superior sector that is varied and diverse. Frequent sectors are Agriculture, Forestry and Fisheries, Large Trade, Retail, Car and Motorcycle Repair, Transportation and Warehousing and Water Procurement, Waste Management, Waste and Recycling.

The leading sectors in each Regency /City are as follows, Kulonprogo Regency in the mining and quarrying sector, Bantul Regency in the processing industry sector, Gunungkidul Regency in the Mining and Quarrying sector, Sleman Regency in the Corporate Services sector and Yogyakarta City in the Financial Services and Insurance sector. The sector has the potential to be exported to other regions so that it can generate added value and have the opportunity to increase local income.

Meanwhile, sectors that have the potential to be developed again include the Construction Services sector, Health Services and Social Activities, Processing Industry Company Services and Warehousing Transportation. With the development of measurable and directed regional potential and by improving infrastructure through good regional policies, it can improve the regional economy which in turn can encourage community welfare and improve the standard of living of the people in regencies/cities in D.I. Yogyakarta Province.

## Reference

- Anghelache, C., Jacob, S. V., & Grigorescu, D. L. (2020). "Analysis of the Quarterly Evolution of the Gross Domestic Product in 2019." *Theoretical and Applied Economics*, XXVII (3), 243–260.
- Arifien, M., Fafurida, F., & Noekent, V. (2012). "Agricultural-Based Development Planning for Food Crops in An Effort to Overcome Poverty Problems." *Journal of Development Economics: A Study of Economic And Development Problems*, 13 (2), 288. <https://doi.org/10.23917/jep.v13i2.175>
- Badrudin, R. (2012). "Local Economic Development of Regencies/Cities of Yogyakarta Special Region Province Using Klasen Typology and Location Quotient." *Journal of Business Research and Management*, 7 (1), 17–37. <https://doi.org/http://dx.doi.org/10.21460/jrmb.2012.71.81>
- Basuki, M., & Mujiraharjo, F. N. (2017). "Analysis of the Leading Sector of Sleman Regency with the Shift Share and Location Quotient Methods." *Journal of Science, Technology And Industry*, 15(1), 52–60. <https://doi.org/10.4103/2276-7096.188531>
- Brinkmann, R. (2018). "Economic Development and Sustainability: A Case Study from Long Island, New York BT - The Palgrave Handbook of Sustainability: Case Studies





- and Practical Solutions*" (R. Brinkmann & S. J. Garren (eds.); pp. 433–450). Springer International Publishing. [https://doi.org/10.1007/978-3-319-71389-2\\_23](https://doi.org/10.1007/978-3-319-71389-2_23)
- Edwards, Z. (2015). "Economic Development." In *The Wiley Blackwell Encyclopedia of Race, Ethnicity, and Nationalism* (pp. 1–11).  
<https://doi.org/https://doi.org/10.1002/9781118663202.wberen063>
- Falianty, T. A. (2019). "Macroeconomic Theory and Its Application in Indonesia (1st ed.)." Eagle Press.
- Hardiani, H., & Lubis, T. A. (2017). "Analysis of Leading Sector of Jambi City." *Journal of Regional Financing and Development Perspectives*, 5 (1), 1–12.  
<https://doi.org/10.22437/ppd.v5i1.3853>
- Lee, Y.-S. (2020). "New General Theory of Economic Development: Innovative Growth and Distribution." *Review of Development Economics*, 24 (2), 402–423.  
<https://doi.org/https://doi.org/10.1111/rode.12654>
- Sjafrizal. (2018). "Regional Economic Analysis and Its Application in Indonesia (1st ed.)." PT. Rajagrafindo Persada.
- Sukirno, S. (2015). "Introductory Macroeconomic Theory (3rd ed.)." PT. Rajagrafindo Persada.
- Todaro, M. P., & Smith, S. C. (2020). "Economic Development (13th Editi)." Pearson.
- Woestho, C., Milda Handayani, & Fikri, A. W. N. (2021). "Superior Food Crop Cluster in Central Java Province." *Journal of Scientific Studies*, 21 (1), 55–68.  
<https://doi.org/10.31599/jki.v21i1.303>
- Woestho, C., Sulistyowati, A., & Sari, R. K. (2020). "Analysis of Regional Financial Capabilities and Independence and Their Effect on Economic Growth in Jeneponto Regency." *Journal of Development Economics STIE Muhammadiyah Palopo*, 6 (2), 91–100.
- Wulandari, D., & Sakti, R. K. (2020). "Analysis of the Effect of Economic Growth, Human Development Index, Processing Industry Agglomeration, And Labor Force On Income Disparity (Case Study On The Gate Area Of The Period 2009-2018)." 1–15.
- Yuniarti, P., Wianti, W., & Nurgaheni, N. E. (2020). "Analisis Faktor-faktor yang Mempengaruhi Tingkat Pertumbuhan Ekonomi di Indonesia." *Serambi: Jurnal Ekonomi Manajemen Dan Bisnis Islam*, 2 (3), 169–176.  
<https://doi.org/10.36407/serambi.v2i3.207>

