

Accepted:10-11-2024

Publish : 29-12-2024

# THE POTENTIAL OF THE AGRICULTURAL AND NON-AGRICULTURAL SECTORS FOR ECONOMIC GROWTH REGION IN BEKASI CITY

Beatrice<sup>1\*</sup>, Johan Setiawan<sup>2</sup>, Dian Anggraeni<sup>3</sup>, Setiawan Sariyoga<sup>4</sup>

<sup>1,2,3</sup> Agribusiness Study Program, Faculty of Agriculture, Sultan Ageng Tirtayasa University Corresponding author: <u>4441200123@untirta.ac.id</u>

DOI:10.15408/aj.v18i2.41934

#### Abstract

This study aims to analyze the sectoral dynamics in the Bekasi City economy, focusing on the relative contribution of the agricultural and non-agricultural sectors to regional economic growth. Through a quantitative approach, using Location Quotient and Shift-Share analysis, this study identifies the shift in economic structure from the primary sector towards the secondary and tertiary sectors. The results show that the non-agricultural sector, especially trade and services, is increasingly dominant in driving the economic growth of Bekasi City. This finding indicates the importance of economic diversification and increasing the competitiveness of leading sectors in supporting sustainable development in Bekasi City. This research provides implications for the formulation of more effective regional economic development policies.

Keywords: Location Quotient (LQ), Shift Share (SS), Agriculture sector, Non-agriculture sector.

#### **INTRODUCTION**

The economy of a region is an important aspect that must be analyzed and understood, given that each region has different economic potential and conditions. Changes in the production and consumption of goods and services can have a significant impact on economic growth in the region. According to Sukirno (2006:9), economic growth can be defined as a description of economic development in a certain period compared to the previous period, and is expressed as a percentage change in national income. Adam Smith (1723), in his book "The Wealth of Nations", emphasized that the agricultural sector is a primary sector that is fundamental to human life, as every individual requires food, and many are involved in agricultural activities.

Bekasi City, as a metropolis with a rapid economic growth rate, has begun to experience a shift in land use. Land resources that were previously used for agriculture are now changing functions for industry and settlements, thus pressing the agricultural sector. Based on data from the Bekasi City Agriculture and Fisheries Food Security Office, the Bekasi City agricultural land area in 2018 amounted to 475 hectares and then experienced a decrease in agricultural land area, so that the Bekasi City agricultural land area in 2024 amounted to 312 hectares.



Figure 1. Growth Rate and Contribution of the Agriculture Sector in Bekasi City, 2019-2023



Received :19-10-2024 Accepted:10-11-2024 Publish : 29-12-2024

Based on the description above, the problems in this research can be identified as follows: (1) analyze the position of economic sectors in Bekasi City, both agricultural and non-agricultural sectors, towards economic growth in Bekasi City over a certain period of time, (2) analyze the relationship between basic and non-basic sectors in supporting economic growth in Bekasi City, and (3) analyze indicators of the priority order of economic sector development in advancing the economy in Bekasi City.

## **RESEARCH METHODS**

#### **Research Location and Time**

This research was conducted in Bekasi City, West Java Province, which was selected purposively due to its relevance to the research objectives. The research was carried out from September 2023 to May 2024.

#### **Data Source Type**

This type of research uses a descriptive analysis method based on secondary data obtained from BPS Bekasi City and literature studies, including books, journals, and other relevant documents. According to Sugiyono (2013), the descriptive analysis method is a research approach that collects, organizes, and analyzes data to accurately and systematically describe a phenomenon as it is. The research instrument utilizes time series data, with analytical tools involving the Gross Regional Domestic Product (GRDP) of Bekasi City for the years 2019 and 2023, as well as the GRDP of West Java Province for the same years.

#### **Data Analysis**

#### Economic Base Analysis

According to Glasson (1997), economic base analysis includes several components, as follows:

a. Location Quotient Analysis (LQ), which is an analysis used to determine whether or not the economic activities of a region are based. The criteria used are that if the LQ > 1 means that the business sector is a basic sector that can be categorized as a leading sector, while LQ < 1 is a non-basic sector. The Location Quotient (LQ) analysis formula is as follows:

L0 =	
Ni / N	

Si = GRDP value of each business sector in Bekasi City

- S = Total GRDP value of all business sectors in Bekasi City
- Ni = GRDP value of each business sector in West Java Province
- N = Total GRDP value of all business sectors in West Java Province
- b. Localization Coefficient Analysis ( $\alpha$ ), used as a further study in determining whether economic sectors are localized or dispersed. As such, the position and performance of leading economic sectors in Bekasi City can be analyzed in relation to the city's economic growth.

Si	Ni
$\alpha i = \frac{1}{S}$	N

- ai = The degree of concentration of each business sector in Bekasi City
- Si = GRDP value of each business sector in Bekasi City
- Ni = Total GRDP value of all business sectors in Bekasi City
- S = GRDP value of each business sector in West Java Province
- N = Total GRDP value of all business sectors in West Java Province



If  $\alpha i \ge 1$  means that the type of activity analyzed is localized (concentrated) in the economic development of the local area, while if the value of  $\alpha i < 1$  means that the type of economic activity is not concentrated in the development of the local area.

c. Specialization Coefficient Analysis ( $\beta$ i), used as a further study in showing whether a region specializes in a particular commodity or not. The formula for Specialization Coefficient analysis is as follows:

$$\beta_i = \frac{Si}{Ni} - \frac{S}{N}$$

- $\beta i$  = Specialization coefficient of each business sector in Bekasi City
- Si = GRDP value of each business sector in Bekasi City
- Ni = GRDP value of each business sector in West Java Province
- S = Total GRDP value of all business sectors in Bekasi City
- N = Total GRDP value of all business sectors in West Java Province

If the value of  $\beta i \ge 1$  means that a business sector specializes or has specialization in economic development in the region, while if the value of  $\beta i < 1$  means that there is no sectoral specialization in the economic development of the region analyzed.

d. Base-Sector Ratio Analysis (BSR), used to measure the relationship between the base sector (export-oriented) and non-base sector (local oriented) in Bekasi City in supporting economic growth in Bekasi City. Here is the formula:

	ZND	
DSK -		
BSR =	$\Sigma B$	

 $\sum B$  = Total value of the basic sector

 $\sum$ NB = Total value of non-basic sectors

If the BSR value is more positive, it means that the basic sector in the region contributes positively to the development of the non-basic sector. In other words, if the BSR value is 1 unit, then the increase in the basic sector is also 1 unit. This means that the basic sector has a positive relationship with the growth of the non-basic sector in the region.

e. Regional Investment Multiplier Analysis (RIM), used as a further study of LQ analysis in terms of the impact of investment activities in the agricultural and non-agricultural sectors on other sectors in Bekasi City. The RIM value is obtained using the following formula:



# Position and Relationship Analysis of Base and Non-Base Sectors

Shift Share Analysis (SS) is used to determine the economic sectors that have a competitive advantage, so that the understanding of the position and relationship of the basic and non-basic economic sectors is more comprehensive about the economic structure of a region and the potential economic sectors that can be the focus of development. Shift share is divided into three components according to (Tarigan 2005:87-89; Putra 2011:165-166), including:

a. National Growth Component (PN), the change in a region's production caused by changes in national production in general, changes in national economic policy or changes in matters



affecting the economy of a sector and region. The national growth component can be formulated as follows: PNij = (Ra)Yij

- b. Proportional Growth Component (PP), compares the growth of an economic sector to the total growth of the province. This component is influenced by differences in demand, raw material availability, industrial policy, and market structure. A positive value (PPij > 0) indicates that the sector is favored, while a negative value (PPij < 0) indicates slower growth than other sectors. Here, the PP component is formulated: PPij = (Ri-Ra)Yij
- c. Regional Growth Share (PPW) Component shows the ratio of a region's growth to other regions. PPW is affected by changes in GRDP or employment opportunities, which are influenced by comparative advantage, market access, institutional support, socioeconomic infrastructure, and regional economic policy. The following is the formula for the PPW component: PPWij = (ri-Ri)Yij

Leading Sector Analysis in this study, obtained by combining the results of Shift Share and Location Quotient, is useful for obtaining leading agricultural sub-sectors that will be recommended to Bekasi City by determining the order, namely: main, priority, potential, competitive, and miss priority. This can help the government or stakeholders to allocate resources more effectively in economic development efforts in the region. The following are each of the criteria:

- a. Main, where the LQ value > 1. The sector grows positively if PP > 0 and has a comparative advantage if PPW > 0. If all three values (LQ, PP, PPW) are positive, the sector is very instrumental in the development of Bekasi City.
- b. Priority, where the sector has high growth (positive PP), strong base (LQ > 1), and natural resource potential, although without comparative advantage (PPW). Priority is determined by LQ and PP.
- c. Competitive, contributes significantly to GRDP, meets local needs, and exports. Top priority sector, followed by competitive sector. Competitiveness analysis determines the leading sector in Bekasi City.
- d. Potential, has comparative and growth advantages. Sectors with both are considered superior, even though their contribution to GRDP is small.
- e. Miss Priority, characterized by sectors without positive contribution to LQ, PP, and PPW, due to lack of comparative advantage, slow growth, low contribution, and inability to meet local and export demand.

Determination of leading or potential sectors can be based on the order, this can be explained through the following table:

No.	Indikator Urutan	Basis dan Non-Basis	Laju Pertumbuhan	Keunggulan
	Prioritas	(LQ)	(PP)	Komparatif (PPW)
1.	Utama	+	+	+
2.	Prioritas	+	+	-
3.	Kompetitif	+	-	+
4.	Potensi	-	-	+
		-	+	-
		-	+	+
5.	Miss Priority	+	-	-

#### Table 1. LQ and SS Analysis Combination

After that, the sector growth profile is evaluated with 4 quadrants. The horizontal axis shows the change in PP, and the vertical axis shows the growth of PPW, with PP as the abscissa and PPW as the ordinate.

Received :19-10-2024 Accepted:10-11-2024 P

Publish : 29-12-2024



Figure 2. Sector Growth Profile

The explanation of each quadrant contained in Figure 1 above is as follows:

- 1. Quadrant I: PP and PPW are positive; sectors are growing fast and have high competitiveness.
- 2. Quadrant II: PP positive, PPW negative; sector is growing fast, but low competitiveness.
- 3. Quadrant III: PP and PPW are negative; sectors grow slowly and have low competitiveness.
- 4. Quadrant IV: PP negative, PPW positive; slow-growing sector, but high competitiveness.

# **RESULTS AND DISCUSSION**

This study uses data on Gross Domestic Product of Bekasi City and West Java Province at Constant Prices by Business Field in 2019-2023 (billion rupiah). The following is a discussion of the calculation of Location Quotient, Localization Coefficient, Specialization Coefficient, Base-Sector Ratio, Regional Investment Multiplier, and Shift Share:

#### **Location Quotient**

The results of the Location Quotient calculation (**Table 2**), it can be concluded that there are 11 basic sectors in Bekasi City, namely the Electricity and Gas Procurement, Water Procurement, Waste Management, Waste and Recycling, Construction, Wholesalers and Retailers; Car and Motorcycle Repair, Transportation and Warehousing, Accommodation and Drinking Food Provision, Financial and Insurance Services, Real Estate, Corporate Services, Health Services and Social Activities, and other services.

#### **Localization and Specialization Coefficients**

The results of the LQ analysis show the existence of base sectors in several economic sectors in Bekasi City (LQ> 1) (**Table 3**). However, the results of the coefficient analysis ( $\alpha$ ) show that the basic economic sectors are actually only able to meet the needs of the Bekasi City area and have not been able to be directed to export outside the region. At the same time, the results ( $\beta$ ) show that the Bekasi City economic sector does not specialize in a particular economic sector production activity and activities in the basic sector can only meet the needs of the Bekasi City area and have not been directed to meet export demands.

# **Base-Sector Ratio and Regional Investment Multiplier**

BSR analysis shows that the base sector in Bekasi City has high income and labor absorption, with a BSR value > 1 (5.30). The non-base sector BSR < 1 (0.12) indicates financial constraints. The RIM value > 1 (6.30) shows that investment has a multiplier effect of 6.30 times, signifying high economic growth potential.



Accepted:10-11-2024

Publish : 29-12-2024

Economic Sector Symbol	Business Field	Average LO	Description
A	Agriculture, Forestry and Fisheries	0,07	Non-Base
В	Mining and Quarrying	0,00	Non-Base
С	Processing Industry	0,79	Non-Base
D	Electricity and Gas Procurement	2,95	Base
Е	Water Supply, Waste Management, Waste and Recycling	1,07	Base
F	Construction	1,40	Base
G	Wholesaling and Retailing; Car and Motorcycle Repairs	1,49	Base
Н	Transportation and Warehousing	2,10	Base
Ι	Provision of Accommodation and Drinking Water	1,44	Base
J	Information and Communication	0,67	Non-Base
K	Financial and Insurance Services	1,11	Base
L	Real Estate	1,37	Base
М	Company Services	1,04	Base
Ν	Government Administration, Defense, and Compulsory	0,88	Non-Base
	Social Security		
0	Education Services	0,78	Non-Base
Р	Health and Social Services	1,55	Base
0	Other Services	1,41	Base

Table 2. Location (	Duotient Calculation Results of Bekasi City, 2019-2023
	y aotioni Calculation Results of Derasi City, 2017 2025

Source: BPS West Java Province in Figures 2019-2024, processed

Table 3. Localization and Specialization Coefficient of Economic Sector in Bekasi City, 2019-2023

Business Field	Average Coefficient of Localization	Average Coefficient of
(in symbol form)		Specialization
А	-0,04	-0,07
В	-0,05	-0,02
С	-0,01	-0,09
D	0,09	0,01
Е	0,00	0,00
F	0,02	0,03
G	0,02	0,07
Н	0,05	0,05
Ι	0,02	0,01
J	-0,02	-0,02
K	0,01	0,00
L	0,02	0,01
М	0,00	0,00
Ν	-0,01	0,00
0	-0,01	-0,01
Р	0,03	0,00
Q	0,02	0,01

Source: BPS West Java Province in Figures 2019-2024, processed

# Shift Share

#### Ratio of GRDP of Bekasi City and West Java Province

The Ra value of 0.12 indicates that West Java's economic growth increased by 0.12. Ri values vary, indicating fluctuations in economic sectors (Table 4). The Information and Communication sector has the highest ri (0.60) because it is supported by the Smart City concept.

#### Shift Share

Regional development is influenced by National Growth (PN), Proportional Growth (PP), and Regional Share Growth (PPW). If all three are positive, the growth rate of the Bekasi City economic sector increases (Table 5).

Accepted:10-11-2024

Publish : 29-12-2024

Table 4. Ratio of GRDP of Bekasi Ci	City and West Java Province
-------------------------------------	-----------------------------

Economic Sector Symbols	Ra	Ri	ri
А	0,12	0,08	0,10
В	0,12	-0,04	0,00
С	0,12	0,12	0,12
D	0,12	0,09	-0,03
Е	0,12	0,28	0,34
F	0,12	0,05	0,02
G	0,12	0,03	0,03
Н	0,12	0,18	0,28
Ι	0,12	0,14	0,11
J	0,12	0,65	0,60
K	0,12	0,10	0,04
L	0,12	0,26	0,18
М	0,12	0,07	0,05
Ν	0,12	-0,08	-0,03
0	0,12	0,15	0,17
Р	0,12	0,14	0,12
Q	0,12	0,16	0,20

Source: BPS West Java Province in Figures 2019-2024, processed

**Table 5.** Regional Growth Component of Bekasi City, 2019-2023

6						
<b>Business Field</b>	PNij	%PNIJ	PPIJ	Description	PPWij	Description
А	41,37	12%	-12,58	Slow	6,66	Competitive
В	0,00	0%	0,00	Slow	0,00	Not Competitive
С	2791,45	12%	-67,00	Slow	41,17	Competitive
D	95,01	12%	-24,21	Slow	-92,46	Not Competitive
Е	6,86	12%	9,09	Fast	3,24	Competitive
F	1020,04	12%	-554,30	Slow	-335,34	Not Competitive
G	1908,63	12%	-1382,39	Slow	-79,52	Not Competitive
						_
<b>Business Field</b>	PNij	%PNIJ	PPIJ	Description	PPWij	Description
Н	791,75	12%	388,56	Fast	687,44	Competitive
Ι	330,21	12%	59,31	Fast	-82,70	Not Competitive
J	240,07	12%	1053,27	Fast	-97,15	Not Competitive
K	230,93	12%	-36,61	Slow	-109,21	Not Competitive
L	150,70	12%	179,23	Fast	-103,81	Not Competitive
М	39,64	12%	-15,98	Slow	-7,48	Not Competitive
N	135,28	12%	-228,23	Slow	54,37	Competitive
0	184,95	12%	49,73	Fast	29,33	Competitive
Р	106,58	12%	17,67	Fast	-14,85	Not Competitive
Q	255,47	12%	90,04	Fast	79,01	Competitive

Source: BPS West Java Province in Figures 2019-2024, processed

The interpretation of the calculation results, as shown in Table 5, is as follows:

- a. National Growth (PN), based on Table 5, the economic growth of Bekasi City is positively influenced by the economic growth of West Java. The sector with the largest decrease in PN contribution is Water Procurement, Waste Management, Waste, and Recycling, while the smallest decrease is the Wholesale and Retail Merchants; Car and Motorcycle Repair sector, indicating that the first sector has less influence on national policy.
- b. Proportional Growth (PP), based on Table 5, shows nine sectors with negative PP (slow growth), including Agriculture, Industry, and Financial Services. The sector with the highest positive PP is Information and Communication (PP 1,053.27), which is the fastest growing in Bekasi City.



c. Regional Share (PPW), based on the table, the 5 sectors with good competitiveness (PPW > 0) are Agriculture, Manufacturing Industry, Water Supply, Transportation, Administration, Education Services, and Other Services, leading sectors. The other nine sectors have no competitive advantage.

To determine the total indicator of economic activity on the three components of regional growth can be used with the following formula:

- 1. National Growth (PN.j) = PN1 + PN2 + PN3 + ..... + PNn, then it can be written as follows:
- 2. Proportional Growth (PP. j) = PP1 + PP2 + PP3 + ...... + PPn, then, it can be written as follows:
  - $\begin{array}{l} \text{PP. } j = (-12.58) + 0.00 + (-67.00) + (-24.21) + 9.09 + (-554.30) + (-1382.39) + 388.56 + \\ 59.31 + 1053.27 + (-36.61) + 179.23 + (-15.98) + (-228.23) + 49.73 + 17.67 + \\ 90.04 = -474.41 \end{array}$
- 3. Growth Area Share (PPW.j) = PPW1 + PPW2 + PPW3 + ...... + PPWn, then, it can be written as follows:

$$\begin{split} PPW.j &= 6.66 + 0.00 + 41.17 + (-92.46) + 3.24 + (-335.34) + (-79.52) + 687.44 + \\ (-82.70) + (-97.15) + (-109.21) + (-103.81) + (-7.48) + 54.37 + 29.33 + \\ (-14.85) + 79.01 &= -21.29 \end{split}$$

Accordingly:

- 1. Based on the influence of national growth, the GRDP of Bekasi City increased by Rp. 8328.92 billion.
- 2. Based on the effect of proportional growth, the GRDP of Bekasi City decreased by Rp. 474.41 billion.
- 3. Based on the effect of regional share growth, the GRDP of Bekasi City decreased by Rp. -21.29 billion.

# Economic Growth Profile of Bekasi City (with 4 quadrants and combined LQ, PP, and PPW tables)

Evaluation of the growth profile of economic sectors in Bekasi City was carried out with the help of 4 quadrants on the number line. The values contained in the 4 quadrants are obtained from the proportional growth value (PP) and the percentage value of regional share growth (PPW). The percentage of PP and PPW will show which quadrant each sector is in.

The interpretation of the calculation results, as shown in Table 5, is as follows:

- a. Quadrant I, where sectors in quadrant I are characterized by having rapid growth and competitiveness when compared to other regions in West Java Province. Sectors in quadrant I include: electricity and gas procurement, construction, wholesale and retail trade; repair of cars and motorcycles, financial services and insurance, and company services.
- b. Quadrant II, where sectors in quadrant II are characterized by having rapid growth but lack competitiveness when compared to other regions in West Java Province. Sectors in quadrant II include: agriculture; forestry and fisheries, processing industry, government administration; defense; and mandatory social security.
- c. Quadrant III, where sectors in quadrant III are characterized by slow growth and lack competitiveness when compared to other regions in West Java Province. Sectors in



quadrant III include: water supply sector; waste management; waste and recycling, transportation and warehousing, education services, and other services.

d. Quadrant IV, where sectors located in quadrant IV are characterized by having competitiveness when compared to other regions in West Java, but have slow growth. Sectors in quadrant IV include: accommodation and food supply sector, information and communication, real estate, and health services.



Figure 1. Growth Profile Quadrant of Economic Sectors in Bekasi City 2019-2023

Business	LQ	PP	PPW	Description
Field				
А	0,07	-12,58	6,66	Competitive
В	0,00	0,00	0,00	-
С	0,79	-67,00	41,17	Competitive
D	2,95	-24,21	-92,46	Miss Priority
Е	1,07	9,09	3,24	Main
F	1,40	-554,30	-335,34	Miss Priority
G	1,49	-1382,39	-79,52	Miss Priority
Н	2,10	388,56	687,44	Main
Ι	1,44	59,31	-82,70	Priority
J	0,67	1053,27	-97,15	Priority
K	1,11	-36,61	-109,21	Miss Priority
L	1,37	179,23	-103,81	Priority
М	1,04	-15,98	-7,48	Miss Priority
Ν	0,88	-228,23	54,37	Priority
0	0,78	49,73	29,33	Miss Priority
Р	1,55	17,67	-14,85	Competitive
Q	1,41	90,04	79,01	Main

**Table 6.** Growth Profile of Bekasi City Economic Sectors for the 2019-2023 Period

Source: BPS West Java Province in Figures 2019-2024, processed



The priority order of Bekasi City's 2019-2023 (Table 6), economic sectors is:

- 1. Main: Sectors in this indicator include: Transportation and Warehousing, Educational Services, and Other Services. This indicator has a significant contribution to GRDP, high growth, and strong comparative advantage.
- 2. Priority: Sectors under this indicator include: Accommodation & Food Supply, Information & Communication, Real Estate, Health & Social Services. Although the LQ < 1 and comparative advantage is negative, it has very high growth.
- 3. Competitive: Sectors in this indicator include: Agriculture, Processing Industry, and Government Administration. Although this indicator has declining growth, it remains competitive.
- 4. Miss Priority: Sectors that fall under this indicator include: Construction, Electricity & Gas Procurement, Wholesaling & Retailing, Financial & Insurance Services, and Corporate Services. Despite having a strong base, growth and comparative advantage are declining.

## CONCLUSION AND SUGGESTION

#### Conclusion

- 1. The position of the agricultural sector in Bekasi City in the 2019-2023 period has experienced a decline in growth from 2019-2023 and has not focused on certain commodities, so it has not been able to export. In contrast, the non-agricultural sector shows varied growth, with the Wholesale and Retail Trade, Car and Motorcycle Repair sector being the fastest growing.
- 2. This study shows that the growth of the base sector boosts the non-base sector through increased income and employment, which is reflected in their contribution to GRDP. The balance between these two sectors is important for regional economic growth and provides the basis for effective policy.
- 3. Indicators of the priority order of economic sector development in Bekasi City can be seen from the sector growth profile.

#### Suggestions

- 1. Bekasi City's agricultural sector needs to be optimized wisely as land continues to decrease due to industrial estates.
- 2. Bekasi City Government needs to support the agricultural sector, which is competitive but still growing slowly, to develop faster.
- 3. Bekasi City Government is expected to pay more attention to and improve the sectors in quadrant III, namely: Water Supply; Waste Management and Recycling, Transportation and Warehousing, Educational Services, and Other Services.

#### BIBLIOGRAPHY

- Abdurrahman. (2023). Analysis of the Relationship between Base Sector Competitiveness and Development Inequality to Economic Growth in Jambi Province. Thesis.
- Arifin, B. (2004). Economic Analysis of Indonesian Agriculture. Jakarta: KOMPAS Book Publishers.
- Arifin, B. (2012). Food Trade Policy. Bandar Lampung: University of Lampung Publisher.
- Arifin, B. (March 2017). Agricultural Economics. In M. P. 2, Agricultural Economics 2nd Edition. South Tangerang, Open University: The Open University.
- Arsyad, L. (February 2019). Introduction to Regional Economic Development Planning. In Introduction to Regional Economic Development Planning, 3rd Edition. Yogyakarta: BPFE-YOGYAKARTA.



- D.S. Piyarsono. (2015). Regional Economics- 1st Edition. South Tangerang, Indonesia: Open University.
- F, N. A. (2022). Analysis of Agricultural Sector Contribution in Economic Growth in West Java Province Location Quotient and Shift Share Analysis. Proceedings Series on Physical and Formal Sciences, Volume 4.
- Putra, W. (2018). The Indonesian Economy The Application of Some Economic Theories of Development in Indonesia. Depok: PT Raja Grafindo Persada.