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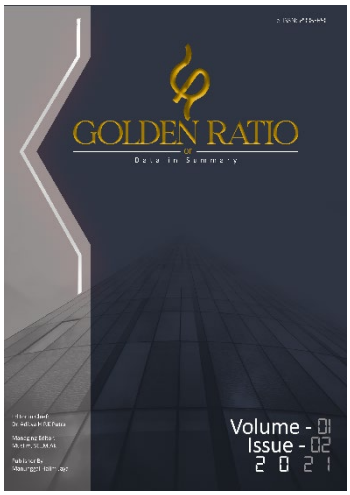

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DESCRIPTIVE OF QUANTITATIVE DATA | SUPPLEMENTARY

Analysis of Comparative Advantages and Shifts in Economic Sectors in Wajo Regency

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Abstract: The aims of this research are: (1) to analyze the growth classification of economic sectors in the Wajo Regency 2017-2021; (2) to analyze the basic sector of the economy in the Wajo Regency 2017-2021; (3) to analyze the share and shifts in the economy sector Wajo Regency 2017-2021. This study uses secondary data obtained from BPS-Statistics South Sulawesi Province, BPS-Statistics Wajo, and the Department of Planning and Regional Development Wajo. Data were analyzed using Klassen Typology, Location Quotient, and Shift-Share analysis. The results of this research show that: (1) Sector classified as a developed sectors in the Wajo Regency is The of Agriculture, Forestry and Fisheries, and sector mining and excavation. (2) sectors is a basic sector of Wajo Regency is the sector of Agriculture, Forestry and Fisheries, sector mining and excavation, sector Procurement Electricity and Gas, the sector of Wholesale and Retail, Car Repair, and Motorcycles, (3) The structure of the Wajo Regency 2017-2021 start forward to slide in the economic sector from primer sector to secondary sector (4). The sectors that have competitive advantages (D) in Wajo are sectors of Agriculture, Forestry and Fisheries, sector Procurement Electricity and Gas, construction sector, sectors Transportation and Warehousing, sector Provision of Accommodation and Food Drink, the Financial Services sector and the insurance sector, Real Estate sector, Service sector Corporate sector Public Administration, Defense, and Social Security Mandatory, and sector service of education.

Keywords: Klassen Typology, LQ, Shift Share

1. INTRODUCTION

Development is a multidimensional process that involves changes in social structure, national institutions, accelerated economic growth, equal distribution of income, and poverty alleviation, all of which aim to improve the quality of life of the community. Development in developing countries including Indonesia is more emphasized on economic development because economic development can support the achievement of goals or can encourage changes in other areas of life (Setiawan, 2014; Zhao et al., 2021). The essence of economic growth and development is a process indicated by government and private policies in managing existing resources and forming a pattern of a partnership between the government and the private sector to create new jobs and stimulate the development of the economic activity. The main problem in economic growth and development lies in the emphasis on economic growth and development policies that are based on regional characteristics (endogenous development) by using the potential of human resources, institutions, and physical resources locally (Kılıç, 2020).

Every business of economic growth and development has the main goal of increasing the number and types of job opportunities to improve people's welfare. To achieve this goal, the government and local communities must jointly take initiatives for regional economic growth and development (Chu et al., 2021; Ullah et al., 2021). Therefore, the government and the local community by using existing resources in the region must be able to assess the potential resources needed to design and develop the regional economy. In 2001, the Government of the Republic of Indonesia officially declared the start

of the implementation of regional autonomy by Law Number 22 of 1999 which was later revised into Law Number 32 of 2014 concerning Regional Government, and Law Number 25 of 1999, which was later revised became Law Number 33 of 2004 concerning Financial Balance between the Central and Regional Governments. From then on, the administration and development of the old regions which were highly centralized and dominated by the central government began to be abandoned. Meanwhile, local governments are given authority and new financial resources to encourage the development process in their respective regions, which in turn will also encourage the process of national development.

Based on the aims and objectives of Law Number 32 of 2004 and Law Number 33 of 2004, Regional Governments must have foresight in analyzing the economic potential in their area. This is related to its obligation on the one hand to determine the real sectors that need to be developed so that the regional economy grows fast and on the other hand to be able to identify the factors that make certain sectors and determine which sectors have good prospects for development and are expected to encourage other sectors to develop. The regional government also needs to determine which sector in the region is the base or superior sector compared to other regions. Thus development can be directed at the development and development of excellence in the future (Ghazinoory et al., 2020; Wang & Zang, 2005).

The regional economy is a process in which the local government and its people manage existing resources and form a pattern of a partnership between the local government and the private sector to create new jobs and stimulate the development of economic activity in the region. So the main goal of regional economic development is to create prosperity for all people in the area. The prosperity of an area is different from other regions. The difference is caused by differences in the structure of the economy and this factor is the main factor (Ramsbottom et al., 2021). Changes in a region to more prosperous conditions depend on the efforts in the area to produce goods and services, as well as the necessary development efforts. Therefore base activities have the main driving role (prime move role) in the economic growth of a region, where changes have an effect multiplier on the regional economy. Equitable distribution of regional development with equitable allocation of investments between regions needs to pay attention to the problems and potentials that exist in the regions so that it is hoped that there will be specialization in the development process with the comparative advantages of each region (Delis et al., 2020). Likewise with regional development through development in the area between the provincial government center and the city/regency and between the city/district area and the sub-district, and so on, it must also pay attention to the existing potential

In determining the success of development in the current era of autonomy, the success of the development is no longer only measured by the physical progress obtained or how much local revenue (PAD) can be received. However, the success of development must be measured by broader and more strategic parameters covering all aspects of life. To meet these expectations, the implementation of development must begin based on priorities and identification of economic sectors that have comparative advantages that have a positive impact on improving the regional economy. To identify this, various approaches to development planning models are used to determine the direction and policies to be taken, one of which is the sectoral approach. This approach is very necessary because it can provide an overview of the advantages possessed by the region which are different from other regions (Alrwajfah et al., 2020). Therefore it is very important to analyze and identify economic sectors that have a comparative advantage for each district/city. Research on comparative advantage analysis has been carried out by several researchers. The comparative advantage of Manado City's economy is the Real Estate Financial and Financial Services sector. The manufacturing sector, the electricity and water supply sector, the building sector, the hotel and restaurant trade sector, the lifting and communication sector, the financial and leasing sector, and the services sector are sectors base in Jayapura City.

Wajo Regency is one of 24 regencies/cities in South Sulawesi Province as an autonomous region that has the authority to organize government and development as well as provide services to the community, has broad authority to manage, plan and optimally utilize the regional economic potential. One indicator to determine the economic condition of a region in a certain period is shown

by the Gross Regional Domestic Product (GRDP). GRDP is the total added value generated by all business units in an area or is the total value of final goods and services produced by all economic units in an area regardless of whether the factors of production come from and or are owned by residents in the area or not. GRDP can be prepared through three approaches, namely the production, expenditure, and income approaches presented at current prices and constant (real) prices. GRDP at current prices is prepared based on prices prevailing during the calculation period and aims to look at the structure of the economy. Meanwhile, GRDP at constant (real) prices is prepared based on prices in the base year and aims to measure economic growth. Looking at the Gross Regional Domestic Product (GRDP) of Wajo Regency, besides being able to know how much economic growth is, can also be known the role of each business sector in the total Gross Regional Domestic Product (GRDP) (Ramsbottom et al., 2021). The role of each of these businesses describes the economic structure of Wajo Regency. The greater the role of a business field, the greater its influence on economic development in the area.

Table 1: GRDP at Current Prices by Business Field in Wajo Regency (Billion Rupiah)

Sector / Field of Business	2017	2018	2019	2021	2021
Agriculture, Forestry, and Fisheries	2.783,48	3.281,34	3.723,44	4.442,16	4.984,67
Mining and excavation	2.125,64	2.243,66	2.544,74	3.100,09	3.077,51
Processing industry	318,72	351,57	400,37	468,86	544,83
Procurement of Electricity and Gas	7,99	8,40	8,95	9,18	8,93
Water Procurement, Waste Management, Waste and Recycling	3,85	3,90	4,00	4,25	4,39
Construction	706,74	860,14	1.060,65	1.220,54	1.430,59
Wholesale and Retail Trade, Car and Motorcycle Repair	1.337,95	1.504,88	1.634,51	1.821,24	2.058,67
Transportation and Warehousing	264,30	291,91	344,12	412,10	476,02
Provision of Accommodation and Food and Drink	26,38	31,09	36,20	41,75	46,82
Information and Communication	131,45	153,91	176,58	185,21	197,02
Financial Services and Insurance	186,48	238,27	280,53	313,10	353,19
Real Estate	228,61	275,44	350,71	424,44	500,08
Company Services	8,30	9,92	12,41	14,31	16,41
Government Administration, Defense, and Compulsory Social Security	383,76	422,85	468,29	523,68	627,20
Education Services	290,95	328,07	391,57	443,01	501,26
Health Services and Social Activities	106,58	123,56	147,78	179,71	207,78
Other Services	33,78	37,77	44,28	52,52	60,34
GRDP ADHB	8.945,02	10.166,67	11.629,14	13.656,15	15.095,70

Source: BPS Wajo Regency, 2021

Based on Table 1, it appears that the value of the Gross Regional Domestic Product (GRDP) of Wajo Regency during the 2017 – 2021 period has continued to increase. The GRDP value of Wajo Regency is Rp.8945.02 billion in 2017, increased to Rp.15, 095.70 billion in 2021. Based on Table 2, during the 2017-2021 period, the contribution of the agriculture, forestry, and fisheries sectors increased. The contribution of this business field increased from 31.12 percent in 2017 to 33.02 percent in 2021. The second highest contributor, namely the mining and quarrying sector, had a declining contribution. In 2011 its contribution was 23.76 percent to 20.39 percent in 2015. As for

the Wholesale and Retail Trade, Car and Motorcycle Repair sectors as the third contributor, and the contribution decreased during 2017-2021. Its share in 2017 was 14.96 percent, down to 13.64 percent in 2021.

Table 2: Percentage Distribution of Gross Regional Domestic Product based on current prices according to business sector In Wajo District (Percent)

Sector / Field of Business	2017	2018	2019	2020	2021
Agriculture, Forestry, and Fisheries	31,12	32,28	32,02	32,53	33,02
Mining and excavation	23,76	22,07	21,88	22,70	20,39
Processing industry	3,56	3,46	3,44	3,43	3,61
Procurement of Electricity and Gas	0,09	0,08	0,08	0,07	0,06
Water Procurement, Waste Management, Waste and Recycling	0,04	0,04	0,03	0,03	0,03
Construction	7,90	8,46	9,12	8,94	9,48
Wholesale and Retail Trade, Car and Motorcycle Repair	14,96	14,80	14,06	13,34	13,64
Transportation and Warehousing	2,96	2,87	2,96	3,02	3,15
Provision of Accommodation and Food and Drink	0,30	0,31	0,31	0,31	0,31
Information and Communication	1,47	1,51	1,52	1,36	1,31
Financial Services and Insurance	2,08	2,34	2,41	2,29	2,34
Real Estate	2,56	2,71	3,02	3,11	3,31
Company Services	0,09	0,10	0,11	0,10	0,11
Government Administration, Defense, and Compulsory Social Security	4,29	4,16	4,03	3,83	4,15
Education Services	3,25	3,23	3,37	3,24	3,32
Health Services and Social Activities	1,19	1,22	1,27	1,32	1,38
Other Services	0,38	0,37	0,38	0,38	0,40
GRDP ADHB	100,00	100,00	100,00	100,00	100,00

Source: BPS Wajo Regency, 2021

The high contribution of the agricultural, forestry, and fisheries sectors in Wajo Regency is inseparable from the Wajo district which is an agricultural area that emphasizes agriculture as the main pillar of the economy. This business field is the main business field that can absorb 37 percent of the total workforce in Wajo Regency.

Table 3: Growth Rate of Gross Domestic Product at Constant 2010 Prices by Business Field in Wajo Regency (Percent)

Sector / Field of Business	2017	2018	2019	2020	2021
Agriculture, Forestry, and Fisheries	12,85	7,45	6,82	10,17	4,79
Mining and excavation	6,33	-3,25	2,32	15,98	9,27
Processing industry	7,09	7,36	8,14	5,20	6,86
Procurement of Electricity and Gas	13,22	8,72	12,83	1,81	8,00
Water Procurement, Waste Management, Waste and Recycling	11,73	0,25	0,55	4,01	0,82
Construction	16,24	16,29	11,96	5,70	7,75
Wholesale and Retail Trade, Car and Motorcycle Repair	8,73	10,39	5,35	8,00	7,03
Transportation and Warehousing	10,52	9,41	9,56	8,37	6,31
Provision of Accommodation and Food and Drink	10,64	10,75	11,21	8,48	6,93
Information and Communication	12,95	13,15	14,64	4,44	9,96
Financial Services and Insurance	13,44	16,43	10,71	4,79	7,85
Real Estate	13,66	14,12	16,33	10,18	8,53
Company Services	14,90	15,57	17,01	6,50	5,46

Sector / Field of Business	2017	2018	2019	2020	2021
Government Administration, Defense, and Compulsory Social Security	5,25	5,13	6,55	2,63	7,63
Education Services	9,56	9,68	12,03	4,79	8,14
Health Services and Social Activities	11,45	10,11	12,18	10,68	7,66
Other Services	9.20	8,06	8,34	7,34	7,11
GRDP	10,11	6,50	6,92	9,68	7,05

Source: BPS Wajo Regency, 2021

If we look at the real GRDP growth rate of Wajo Regency in Table 3 above, it can be seen that in 2015 the sector with the highest growth was achieved by the Information and Communication sector at 9.96 percent. With the decreasing trend of the growth rate of the Agriculture, Forestry, and Fisheries sector in Wajo Regency's GRDP, the Wajo Regency needs to change the paradigm of economic development led by the Agriculture, Forestry, and Fisheries sector to become another sector that can encourage a more sustainable economic growth rate. Based on these conditions, an analysis of sectors that have a comparative advantage as well as patterns of sectoral changes and shifts in the economy of Wajo Regency is urgently needed with the hope that the development planning of Wajo Regency in the future will be more focused and sustainable. Based on the background, the formulation of the problem of this research is:

1. What is the classification of economic sector growth in Wajo Regency?
2. Which sector has a comparative advantage in the economy of Wajo Regency?
3. What are the patterns of changes and shifts in the economic sectors in the economy of Wajo Regency?

2. RESEARCH DESIGN AND METHOD

A. Research Approach

This research is descriptive research with a quantitative approach. Descriptive research is research that seeks to describe current problem-solving based on existing data. So descriptive research also presents data, analyzes, and interprets. The use of this approach is based on the characteristics of the problem to be studied, namely to describe the economic sectors of Wajo Regency which have a comparative advantage.

B. Location and Time of Research

This research was conducted in Wajo Regency, which is one of the districts in South Sulawesi Province. The consideration of this research being carried out in Wajo Regency is that the results of this study in the form of superior sectors/comparative advantages can be used as priority considerations in the development planning of Wajo Regency. The time of conducting this research was December 2016 to February 2017.

C. Data Types and Sources

The data used in this research is secondary data. Secondary data is supporting data obtained from books, magazines, and so on related to research or by taking from other sources published by institutions that are considered competent. The secondary data was obtained from the South Sulawesi Province BPS, Wajo Regency BPS, and Wajo Regency Bappeda. This secondary data includes:

1. Gross Regional Domestic Product (GRDP) at constant prices in Wajo Regency in 2017-2021.
2. Wajo District Medium Term Development Plan (RPJMD) 2016-2021.
3. Other secondary data related to the purpose of this study.

D. Data Collection Techniques

The technique used to obtain the data needed in this study is the documentation technique. Documentation technique is a way to obtain data or information on various matters related to research by reviewing written reports, either in the form of numbers or information. In addition to written report data, for this research various data, information and references were also excavated from various sources in the literature, mass media, and the internet.

E. Data analysis method

To achieve the goals and answer the problems that have been set, three kinds of analytical methods are used, namely:

1. Klassen Typology Analysis
   (Park & Ahn, 2012) The Klassen typology is an analytical tool that can be used to describe the classification of economic sector growth in Wajo Regency which is related to the economy of South Sulawesi Province. The variables used as an analysis tool are the growth rate and contribution of each sector in Wajo Regency and South Sulawesi Province. Klassen Typology Analysis is divided into four classifications (Grunschel et al., 2013),namely:

   a. Advanced and Rapidly Growing Sector (Development Sector), which has a growth rate in GRDP that is greater than the growth rate of regional GRDP that is used as a reference, and has a sector's contribution to GRDP that is greater than the sector's contribution to regional GRDP that is used as a reference.
   b. Sector Forward But Depressed (Stagnant Sector), which has a smaller GRDP growth rate than the reference regional GRDP growth rate, but has a sector contribution value to GRDP that is larger than the sector's contribution to the reference regional GRDP.
   c. Potential or Still Developing Sectors (Developing Sector), which has a GRDP growth rate that is greater than the regional GRDP growth rate that is used as a reference, but has a sector's contribution to GRDP that is smaller than the sector's contribution to the regional GRDP that is used as a reference.
   d. Relative Sector Lagging (Underdeveloped Sector), has a smaller GRDP growth rate than the reference regional GRDP growth rate and has a sector contribution to GRDP that is smaller than the sector's contribution to the reference regional GRDP.

   The GRDP sector classification according to the Klassen Typology can be seen in Table 4 below.

Table 4: Classification of GRDP Forming Sectors According to the Class Typology

Contribution Fast Growth	ski >	SK ski < SK
si > s	Quadrant I A developed and rapidly growing sector developed sector)	Quadrant III Potential sectors or can still develop (developing sector)
si < s	Quadrant II The sector is advancing but depressed (stagnant sector)	Quadrant IV Relatively lagging sector (underdeveloped sector)

Source: Sjafrizal, 2008

Information:
And = Growth rate of the sector I in Wajo Regency
s = Growth rate of the sector I in South Sulawesi Province
ski = The contribution value of sector I to GRDP in Wajo Regency
SK = The contribution value of sector I to GRDP in South Sulawesi Province

2. Analysis Location Quotient

The analysis is used to determine the basis and non-base sectors Location Quotient (L.Q.). This method is one of the approaches commonly used in basic economic theory. LQ is the ratio of the role of the local sector to the same sector at a wider reference level.

To calculate LQ the following formula is used (Yang & Smith, 2023) :

$$LQ = \frac{\frac{GRDP_{B,i}}{GRDP_B}}{\frac{GRDP_{SS,i}}{GRDP_{SS}}}$$

Where:

GRDPB, i = GRDP of the sector I in a Regency in a certain year
GRDPB = Total GRDP in a Regency in a certain year
GRDPSS, i = GRDP of the sector I in a province in a certain year
PDRBss =Total GRDP in a province in a given year

The criteria for measuring LQ are as follows (Billings & Johnson, 2012):

a. If LQ > 1, it means that the level of specialization/base of the sector I in an area is greater than that of the same sector in the economy in a reference area. This shows that the region has a comparative advantage for the sector i.
b. If LQ < 1, it means that the level of specialization/sector base I in an area is smaller than the same sector in the economy in a reference area.
c. LQ = 1, means that the level of specialization/sector base I in an area is the same as the same sector in the economy in a reference area.

A sector is said to be basic and has a comparative advantage if the LQ value is > 1. Conversely, a sector is said to be non-base and does not have a comparative advantage if the LQ value is < 1.

3. Analysis Shift Share

Analysis Shift Share is used to analyze the pattern of changes and shifts in the economic sector of a region. Analysis results shift Share will describe the performance of the sectors in the economy of a region compared to the reference area (Lin et al., 2019).

Through analysis of shift Share, then economic growth and the pattern of structural shifts in the economy of a region are determined by three components, namely:

a. Provincial Share (PS) is a contributing component of the overall reference regional economic growth to the regional economy. Component Share is the condition of economic growth in all reference areas in a certain period expressed in the form of GRDP growth. Component values share shows the local growth rate that occurs if it is assumed that the local economy grows at the same growth rate as the reference area (Weschke et al., 2022). Components are also considered the initial driver of local economic growth caused by the influence of regional factor growth contributions. But in reality, local economic growth is also influenced by other factors, resulting in deviations from economic growth due to factors share earlier. Deviations that occur against factors shared due to sector-specific factors and local factors that influence local economic growth are known as components that shift or shift (Grossi & Mussini, 2018).
b. Proportional Shift (P). This component is often referred to as a structural component or industrial mix. This component measures the value of the shift in sectoral composition that occurs in the reference economic structure or the difference between the growth of individual sectors and the overall economic growth of the reference area (Khusaini, 2015). This component has a positive value if the sectors in the reference area experience faster

growth than the overall economic growth in the reference area and a negative value if the sectors in the reference region experience lower growth compared to the overall economic growth in the reference area.

c. Differential Shift (D). This component is often referred to as the local growth contribution (local share). The magnitude measured by this component is a deviation or shift in certain local sectors due to faster or slower growth than the growth of the same sector in the reference area. This component has a positive value if the local sectors are growing faster than the same sector in the reference area, and it is negative if the local sector has a lower level of development or is below the same sector in the reference area. Magnitude differential shift This in several references is often referred to as the competitive advantage of the local economic sector (Mogila et al., 2021).

Mathematically, component provincial Share (PS), Proportional Shift (P) and differential Shift (D) can be formulated as follows (Sjafrizal, 2008:91):

$$PSi,t = Andr,i,t\text{-}n(ANDN,t / ANDN,t\text{-}n) - ANDr,i,t\text{-}n \quad (4)$$

$$Pr,i,t = \{(AndN,i,t / ANDN,i,t\text{-}n) - (ANDN,t / ANDN,t\text{-}n) \times Er,i,t\text{-}n)\} \quad (5)$$

$$Dr,i,t = \{Andr,i,t\text{-} (ANDN,i,t / ANDN,i,t\text{-}n) - ANDr,i,t\text{-}n\} \quad (6)$$

$$\Delta Er,i,t = PSi,t + Pr,i,t + Dr,i,t \quad (7)$$

Information

ANDr, I,t-n = GRDP sector I local area in the initial year of analysis
ANDr, I,t = GRDP sector I local area last year of analysis
ANDN, I,t-n = GRDP of the sector I reference area in the initial year of analysis
ANDN, i,t = GRDP sector I reference area final year of analysis
ANDN,t-n = GRDP of the total reference area in the initial year of analysis
ANDN,t =GRDP of the total reference area at the end of the analysis
Δ Er, I,t =Total Local economic growth

PS = Provincial Share
P = Proportional Shift
D = Differential Shift

F. Operational definition

To equalize perceptions of the variables used and to avoid differences in interpretation, operational definitions are given as follows:

1. Comparative advantage is an advantage possessed by a region to be able to compare it with other regions. The ability of a commodity for an area is relatively superior to other commodities in the area. Commodities that have advantages, even if only in comparison, are more profitable to develop compared to other commodities.
2. The economic sector is the business field contained in the GRDP component which consists of 17 sectors, namely Agriculture, Forestry and Fisheries, Mining and Quarrying, Processing Industry, Electricity and Gas Procurement Sector, Water Supply, Waste Management, Waste and Recycling, Construction Sector, Wholesale and Retail Trade Sector, Car and Motorcycle Repair, Transportation and Warehousing Sector, Accommodation and Food and Beverage Provision Sector, Information and Communication Sector, Financial Services and Insurance Sector, Real Estate Sector, Corporate Services Sector, Government Administration Sector, Defense and Compulsory Social Security, Education Services Sector, Health Services, and Social Activities Sector, and Other Services Sector
3. Changes in Economic Structure are changes in the performance of economic sectors caused by provincial economic growth, growth in certain sectors, or caused by local competitiveness.

4. Economic Sector Shift is a change in either the growth or decline of the economy of a region (region) from time to time in economic sectors from the primary sector to the secondary and tertiary sectors.
5. Economic development is a series of activity processes carried out by a region to develop economic activities or activities to increase the standard of living/prosperity of the community in the long term.
6. Economic growth is an increase in the total production of a region's GRDP as measured by the increase in capacity and production volume produced by the region from year to year.
7. Gross Regional Domestic Product (GRDP) is the total added value of goods and services produced by economic sectors in a region/region in a certain period, measured at constant 2010 prices

3. RESULTS

1. Population and Employment Conditions

a. Population

The population of Wajo Regency in 2021 based on population registration was 404,538 people consisting of 192,387 male residents (47.54 percent) and 212,151 female residents (52.44 percent). The population growth of Wajo Regency is relatively low, from 2017 to 2021 the population of Wajo Regency only grew in the range of 0.54 to 1.42 percent per year. The highest growth occurred in 2020 which reached 1.42 percent. This phenomenon is based on the relatively high mobility of the Wajo population for various reasons such as working, looking for work, or studying outside the Wajo area. In addition, the average number of children born has also decreased, affecting the rate of population growth.

Table 5: Population Indicators of Wajo

Category	2017 (people)	2018 (people)	2019 (people)	2020 (people)	2021 (people)
Total Population	388.173	392.651	394.789	399.287	404.538
Man	185.148	187.191	188.250	189.816	192.387
Woman	203.025	205.460	206.539	209.471	212.151
Population growth rate	-	1,15	0,54	1,42	1,32
Sex ratio	91	91	91	91	91
Average household member	4	4	4	4	4

Source: Wajo in Figures, 2016

Table 6: Population of Wajo Regency per District

No	Subdistrict	Total Population (People)	Percentage
1	Belawa	26.613	6,58
2	Tempe	63.144	15,61
3	Pammana	32.191	7,96
4	Bola	20.288	5,02
5	Keera	21.819	5,40
6	Majauleng	19.609	4,85
7	Maniang Pajo	16.479	4,07
8	Pammana	33.215	8,21
9	Penrang	41.014	10,14
10	Belawa	33.202	8,20
11	Pitumpanua	16.804	4,15
12	Sabangparu	11.785	2,91

No	Subdistrict	Total Population (People)	Percentage
13	Sajoanging	23.672	5,85
14	Takkalalla	44.733	11,06
Total 2017		404.538	
Total 2018		399.287	
Total 2019		394.789	
Total 2020		392.651	
Total 2021		388.173	

Source: Wajo in Figures, 2021

b. Employment

Table 7: Percentage of the Population Aged 15 and Over Who Worked in Wajo District in the Past Week by Main Employment

Main Field of Work	2019	2020	2021
Agriculture	49,12	48,18	46,66
Industry	11,16	9,14	6,22
trade	16,34	16,56	19,99
Services	11,35	15,79	18,72
Other	12,03	10,33	8,41
Total	100.00	100.00	100.00

Source: Wajo District in Figures, 2021

c. GRDP Per Capita

Table 8: GRDP Per Capita of Wajo Regency Series 2010, 2011 – 2015 (Million Rupiah)

Year	Based on Current Prices	Based on 2010 constant prices
2017	23,04	21,33
2018	25,89	22,46
2019	29,46	23,88
2020	34,20	25,90
2021	37,32	27,37

Source: BPS Wajo Regency, 2021

2. Classification Analysis of Economic Sector Growth in Wajo Regency

Table 9: Average Growth Rate and Sector Contribution to GRDP in Wajo Regency and South Sulawesi Province (%)

Economic Sector	Growth Rate		Contribution	
	Wajo	South Sulawesi	Wajo	South Sulawesi
Agriculture, Forestry, and Fisheries	8,42	6,40	31,98	21,88
Mining and excavation	6,13	5,23	22,43	6,26
Processing industry	6,93	8,51	3,47	14,02
Procurement of Electricity and Gas	8,92	8,41	0,08	0,09
Water Procurement, Waste Management, Waste and Recycling	3,47	4,83	0,03	0,14
Construction	11,59	8,39	8,72	11,78
Wholesale and Retail Trade, Car and Motorcycle Repair	7,90	8,91	14,26	13,82
Transportation and Warehousing	8,83	8,29	2,96	3,79
Provision of Accommodation and Food and Drink	9,60	8,07	0,31	1,35

Economic Sector	Growth Rate		Contribution	
	Wajo	South Sulawesi	Wajo	South Sulawesi
Information and Communication	11,03	12,03	1,48	6,04
Financial Services and Insurance	10,64	11,54	2,31	3,42
Real Estate	12,56	9,19	2,89	3,63
Company Services	11,89	7,32	0,10	0,43
Government Administration, Defense, and Compulsory Social Security	5,44	4,44	4,05	4,80
Education Services	8,84	7,51	3,30	5,43
Health Services and Social Activities	10,42	9,50	1,25	1,86
Other Services	7,71	7,70	0,38	1,27

Source: Processed data, 2021

Table 10: Classification of the Wajo Regency GRDP Forming Sectors according to the Klassen Typology

Contribution Fast Growth	ski >	SK ski < SK
si > s	Quadrant I A developed and rapidly growing sector developed sector) Agriculture, Forestry, and Fisheries Mining and excavation	Quadrant III Potential sectors or can still develop (developing sector) Procurement of Electricity and Gas Construction Transportation and Warehousing Provision of Accommodation and Food and Drink Company Services Government Administration, Defense, and Compulsory Social Security Education Services Health Services and Social Activities Other Services
si < s	Quadrant II The sector is advancing but depressed (stagnant sector) Wholesale and Retail Trade, Car and Motorcycle Repair	Quadrant IV Relatively lagging sector (underdeveloped sector) Processing industry Water Procurement, Waste Management, Waste and Recycling Information and Communication Financial Services and Insurance

Source: Processed data, 2021

3. Comparative Advantage Analysis in Wajo District

Table 11: LQ Value of Wajo Regency

Sector	2017	2018	2019	2020	2021	Mean	Information
Agriculture, Forestry, and Fisheries	1,34	1,41	1,45	1,42	1,41	1,41	Basis
Mining and excavation	3,79	3,56	3,47	3,55	3,60	3,60	Basis
Processing industry	0,26	0,26	0,26	0,25	0,25	0,26	Not Basis
Procurement of Electricity and Gas	1,14	1,09	1,14	1,02	1,15	1,11	Basis

Sector	2017	2018	2019	2020	2021	Mean	Information
Water Procurement, Waste Management, Waste and Recycling	0,30	0,30	0,29	0,29	0,29	0,30	Not Basis
Construction	0,67	0,73	0,74	0,72	0,72	0,71	Not Basis
Wholesale and Retail Trade, Car and Motorcycle Repair	1,09	1,10	1,09	1,08	1,07	1,09	Basis
Transportation and Warehousing	0,83	0,82	0,85	0,88	0,88	0,85	Not Basis
Provision of Accommodation and Food and Drink	0,23	0,23	0,24	0,24	0,24	0,24	Not Basis
Information and Communication	0,29	0,28	0,28	0,27	0,28	0,28	Not Basis
Financial Services and Insurance	0,65	0,67	0,69	0,67	0,67	0,67	Not Basis
Real Estate	0,76	0,80	0,86	0,86	0,87	0,83	Not Basis
Company Services	0,22	0,24	0,26	0,26	0,26	0,25	Not Basis
Government Administration, Defense, and Compulsory Social Security	0,80	0,85	0,88	0,86	0,86	0,85	Not Basis
Education Services	0,57	0,59	0,62	0,61	0,61	0,60	Not Basis
Health Services and Social Activities	0,62	0,63	0,65	0,64	0,63	0,63	Not Basis
Other Services	0,31	0,31	0,32	0,31	0,31	0,31	Not Basis

Source: Data processed, 2021

4. Analysis of Changes and Shifts in the Economic Sector in Wajo District

Table 12: Shift Share Analysis for Wajo Regency (billions of Rupiah)

Sector	PS	P	D	E
Agriculture, Forestry, and Fisheries	773,78	-89,47	127,06	811,37
Mining and excavation	614,51	49,72	-159,28	504,95
Processing industry	91,04	22,28	-22,20	91,12
Procurement of Electricity and Gas	2,46	0,36	0,02	2,84
Water Procurement, Waste Management, Waste and Recycling	1,12	-0,68	-0,23	0,21
Construction	195,57	60,66	54,13	310,36
Wholesale and Retail Trade, Car and Motorcycle Repair	375,05	104,05	-55,33	423,77
Transportation and Warehousing	78,91	1,21	17,92	98,04
Provision of Accommodation and Food and Drink	7,68	1,13	1,87	10,68
Information and Communication	39,66	34,38	-10,43	63,61
Financial Services and Insurance	53,84	21,99	4,13	79,96
Real Estate	67,72	18,79	43,04	129,55
Company Services	2,42	0,04	1,69	4,15

Sector	PS	P	D	E
Government Administration, Defense, and Compulsory Social Security	106,96	-47,40	25,13	84,69
Education Services	79,38	-1,38	24,08	102,08
Health Services and Social Activities	28,13	12,41	2,62	43,16
Other Services	9,82	1,76	-0,39	11,19
Amount	2.528,06	189,85	53,83	2.771,73

Source: Data processed, 2021

Table 13: Sector Contribution to GRDP of Wajo Regency (Percent)

Economic Sector	2017	2018	2019	2020	2021
FIRST Agriculture, Forestry, and Fisheries	31,12	32,28	32,04	32,41	32,04
Mining and excavation	23,76	22,07	21,84	22,62	21,84
Amount	54,88	54,35	53,88	55,03	53,88
SECONDS Processing industry	3,56	3,46	3,44	3,45	3,44
Procurement of Electricity and Gas	0,09	0,08	0,08	0,07	0,08
Water Procurement, Waste Management, Waste and Recycling	0,04	0,04	0,03	0,03	0,03
Construction	7,9	8,46	9,13	8,99	9,13
Amount	11,59	12,04	12,68	12,54	12,68
TERTIARY Wholesale and Retail Trade, Car and Motorcycle Repair	14,96	14,8	14,07	13,42	14,07
Transportation and Warehousing	2,96	2,87	2,96	3,04	2,96
Provision of Accommodation and Food and Drink	0,3	0,3	0,31	0,31	0,31
Information and Communication	1,47	1,51	1,52	1,37	1,52
Financial Services and Insurance	2,08	2,34	2,41	2,32	2,41
Real Estate	2,56	2,71	3,02	3,13	3,02
Company Services	0,09	0,1	0,11	0,1	0,11
Government Administration, Defense, and Compulsory Social Security	4,29	4,16	4,02	3,76	4,02
Education Services	3,25	3,23	3,37	3,27	3,37
Health Services and Social Activities	1,19	1,22	1,27	1,32	1,27
Other Services	0,38	0,37	0,38	0,39	0,38
Amount	33,53	33,61	33,44	32,43	33,44
PDRB ADHK 2019	100	100	100	100	100

Source: Data processed, 2021

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