Competitiveness of Gross Regional Domestic Product and Its Effect on Economic Development in Palopo City, South Sulawesi Province

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ABSTRACT
The research aims to analyze the sub-sectors which are the basis of the economy and the competitiveness of the Gross Regional Domestic Product of the City of Palopo and to analyze the Effects of Economic Growth on the Economic Development Index of the City of Palopo, Province of Sulawesi. This research is a descriptive study with a quantitative approach. The data needed in this study are secondary in the form of a time series from 2011 to 2021. This research uses the documentation method from the Central Bureau of Statistics and other related agencies to collect data and information. The techniques used are Location Quotient analysis, Klassen typology, Shift Share, and regression. The findings of this study are that Palopo City has an economic base of electricity, gas, and clean water, Water Procurement, Waste Management, and Recycling, Construction, Trade, Hotels, and Restaurants, Transportation and Warehousing, Financial and Insurance Services Real Estate, Government Administration, Defense, and Compulsory Social Security, Health Services and Social Activities, Other Services. Even though the competitive sub-sectors in Palopo City are the processing industry, gas, electricity and clean water, commerce, hotels, restaurants, transportation, and warehousing, this research also concludes that economic growth in Palopo City does not influence Human Development Index.

Keyword: Gross Domestic Product, Location Quotient, Klassen Typology, Shift Share, IPM

INTRODUCTION

Competitiveness between business sector sectors as a source of output and people's income in one area will differ according to the magnitude of the contribution of these business sector sectors to economic growth in the area concerned, as well as differences in competitiveness with other surrounding regions. Porter (1990) revealed that national competitiveness is one of the main concerns of each government and represents the capacity for industrial development and innovation in their respective countries. The importance of competitiveness is widely recognized, but achievement and improvement are complex processes. Policymakers often find it challenging to identify the measures that will have the most impact needed to increase competitiveness at the regional and city levels, where the factors driving competitiveness and interaction with the national level are not fully understood (WEF, 2014).

A region should have competitiveness in the era of globalization because competitiveness is one of the crucial parameters of sustainable economic development. An area is considered competitive if its inhabitants enjoy a high living and live sustainably. Efforts to define regional competitiveness vary widely, but researchers agree that, for example, Krueger et al. (2018) treat competitiveness as a specific combination of institutional factors in the region, while Prokop and Stejskal explain that competitiveness will have the potential to ensure living standards and high-quality standard of living in an area, according to national and global standards (Prokop & Stejskal, 2015).

Thus, competitiveness is considered a set of advantages used to maximize specific economic indicators and interpreted as the ability of a region to find, create and use competitive advantages compared to the other areas. In line with this, Roșu & Dona, (2016) explained that macroeconomic level competitiveness is "the results obtained, which are translated into employment and income levels, as well as the factors that determine them.

The determinants of competitiveness between regions have been widely explained by researchers, as said by Huggins et al. (2014) that each area has increased its competitiveness through increased knowledge capacity, as well as by Gavurova et al. (2017) argue that the measurement of competitiveness is a complex process that is determined by the heterogeneity of its components owned by the region. Kolmakov & Polyakova (2019)also explained that to increase the competitiveness of an area, regional innovation is needed because each site is different because of the specific features of the region and its competitive specialization. Likewise, Polyakova et al. (2019) explained that the sensitivity of a

measure of competitiveness is related to the economy and is easily adjusted using specific innovations that affect private sector performance and economic growth.

The potential of each region will differ based on the characteristics of the sub-sectors that contribute to economic growth in the area concerned, which will significantly determine its competitive position in global competition. When the paradigm is related to competitiveness, which initially only looks at the competitiveness of a country, as revealed by Porter (1990), it is now more developed to a more specific scope, namely regional competitiveness. Kitson et al. (2004) explained that the attention on the nation's competitiveness shifted to regional competitiveness. The region became the primary location for managing economic improvement and wealth creation.

This situation must then be interpreted as a condition for each region to increase its competitiveness, where high competitiveness between areas is the "spearhead" for increasing competitiveness. The ability of the areas to increase their competitiveness will depend heavily on the strength of the regions to identify and determine the factors driving competitiveness and the power of the places to establish economic policies to encourage the transformation and acceleration of regional economic growth through increasing Gross Regional Domestic Product and Economic Growth as one of the tools. Measure the regional economy, especially in Palopo City.
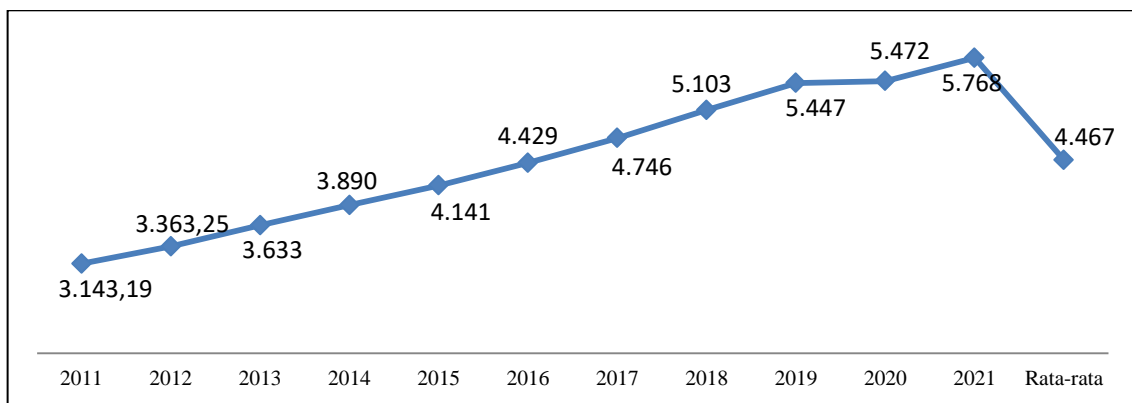
Graph 1. Gross Domestic Regional Product Revenue of Palopo City for 2011-2021
Source : BPS, Palopo City

The graph above illustrates that the condition of the revenue of Palopo City's GRDP has increased yearly. Thus the increase in GRDP should also ideally be followed by the rise in economic growth in each of these regions. Why is that because economic growth is an essential factor in economic development in an area?
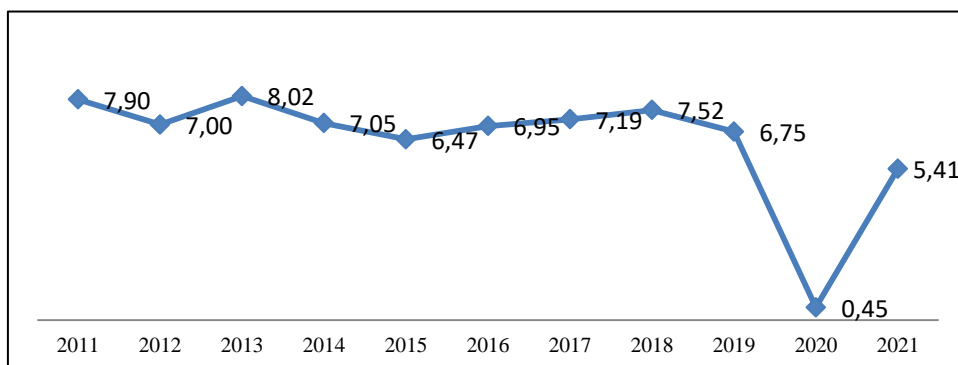
Graph 2 Economic Growth in Palopo City in 2011-2021
Source : BPS, Palopo City

The graph above explains that the condition of Palopo Raya City's economic growth fluctuated, but in 2020 the decline was the most severe during Covid 19, which only touched 0.45 percent. However, from a broader perspective, economic growth is not the only key to successful development in a region. Other aspects, such as the distribution of development results and sustainability, are also benchmarks.

Even so, economic growth remains the dominant aspect that must be the primary consideration for the government in making policies to plan development programs that can increase economic growth.

Increasing economic growth to create competitiveness requires uniformity of rules for technological modernization and applying technological innovation. Innovation policies and designed strategic adjustments will lead to different results regarding the regional performance or overall competitiveness value creation (Polyakova et al., 2019). Economic growth and economic development are difficult to distinguish, so sometimes, there are fundamental differences in defining economic growth, including economic development. The difference is that economic growth is more about the physical development of goods and services that apply to a country and the increase in real national income. At the same time, economic development is not only a matter of developing real national income but also about modernizing economic activities carried out.

Economic development can encourage economic growth, and vice versa; Economic growth will facilitate economic development. With high economic growth, people's welfare will be seen because, with high economic growth, it is hoped that human development can also be achieved; why is that because economic development in an area is very identical to human product which is commonly seen in the Human Development Index (IPM).

The measurement of the Human Development Index in each region refers to three essential indicators, namely the education dimension, the health dimension, and the economic dimension. A high level of human development greatly determines the ability of the population to absorb and manage sources of economic growth, both related to technology and institutions as an essential means of achieving economic growth. The logical consequence of the current economic growth is a competition to market the goods and services produced. So that efforts to increase superior regional potential are mandatory and require extensive resources. The approach that can be taken to overcome these challenges is accelerating economic development and regional development by prioritizing increasing regional competitiveness as the basis for regional economic growth. The objectives of the research are 1) to analyze the sub-sectors which are the basis of the economy, economic structure, and competitiveness of the Gross Regional Domestic Product of the City of Palopo, 2) to analyze the effect of economic growth on the Economic Development Index of the City of Palopo, South Sulawesi Province.

LITERATURE REVIEW

In recent years, an area of conceptual debate among economists is the notion of regional competitiveness, which assumes that the concept of competitiveness is more suitable for firms than for "regions or countries." However, several scientific studies have been conducted to refute this assumption and become a conceptual basis for measuring and identifying the factors that cause a region's competitiveness. Among them, (Liu & White, 2001), (Radosevic, 2002), Robert, (2010), (Huggins et al., 2014), (Huggins & Thompson, 2017), (Martin & Sunley, 2011), (Annoni & Dijkstra, 2019), (Kolmakov & Polyakova, 2019)

To empirically utilize the comparative advantage model, regional competitiveness benchmarking frameworks need to be used as a comparison in each region in terms of components of the framework using performance, process, and policy approaches to see regional strengths and weaknesses, not only using quantitative measures but also considering qualitative aspects.

According to (Fatimah & Hidayat, 2015) the potential economical factors are people's purchasing power and the rate of economic growth that must be considered to create regional competitiveness. Apart from this economic potential, another essential thing to pay attention to is infrastructure and the financial system. In this case, the infrastructure factors that the regions must consider are the availability and quality of infrastructure, such as the quality of roads, the quality of the sea, and airports. Meanwhile, the financial system factor that becomes a priority scale is the performance of financial institutions.

The same thing was also expressed by Huda & Santoso, (2014) that the competitiveness between cities and districts is very different. Regions with high competitiveness are generally dominated by areas that excel in economic potential, regional financial systems, and a productive business environment. The results of this study confirm previous research conducted by (Sukanto, 2009) which stated that urban areas dominated the pattern of inter-regional competitiveness in the province with the highest rank, and newly expanded regions occupied the lowest grade. Various development and innovation efforts in a more directed and integrated manner against an increasingly dynamic environment have been carried out in the framework of developing the regional potential to increase regional development progress and regional competitiveness to achieve community welfare. The higher the level of competitiveness of a region, the higher the level of social welfare. A comparison of competitiveness is needed to see and explain the various levels of regional interest and must be carried out with a sustainable development mechanism.

In responding to the current era of globalization and increasingly fierce global competition, different reactions are faced by each region to determine the bargaining position of each area. So that this situation must then be interpreted as the demands of each location to increase its competitiveness. According to Simon Kuznets, cited by Todaro, economic growth is an increase in the country's long-term ability to provide various economic goods for its population. Improvements are made possible by technological, institutional, and ideological advances or adjustments to different existing conditions (Todaro, 2000).

Generally, theories about economic growth can be grouped into two, namely classical economic growth theory and modern economic growth theory. In classical economic growth theory, the analysis is based on trust and the effectiveness of free market mechanisms. Meanwhile, the current economic growth theory emphasizes the importance of investment formation for economic growth. Can identify Economic growth by comparing the GDP of a specific year (GDPt) with the previous GDP (GDP t-1), whether there is an increase or decrease. The rise in GRDP at constant prices reflects the increase in the production of goods and services from year to year. Rahardjo Adisasmita stated that economic growth is measured by an area's Gross Domestic Product (GDP) and the Gross Regional Domestic Product (GDP). (Adisasmita, 2013)

Muana Nanga observes that there have been at least three shifts in the economic development paradigm. First the growth-oriented development paradigm. This paradigm considers that Gross National Product or Gross Domestic Product is the best indicator of development success. Meanwhile, other problems, such as poverty, unemployment, and income inequality, are considered secondary issues. This paradigm developed in the 1950s and 1960s. Second, the development paradigm is oriented towards equity. In this paradigm, income distribution and poverty reduction are the primary targets and simultaneously become integral to the implemented development strategy or policy. This paradigm then received sharp criticism because it tends to see humans merely as objects of existentialism strategy and charity strategy. Third, the human-centered development paradigm. In this paradigm, the goal of development is directed at human development in the sense of actualizing human values or potentials such as self-esteem, self-reliance, dignity, and empowerment. (Nanga, 2000)

Human development should make humans the tool of development itself, not the ultimate goal. So the success of human development is reflected in the extent to which it can solve fundamental human problems. Currently, the government's attention is very concentrated on dealing with development issues, various human development measures are being developed, but not all of them can be used as a standard measure to compare regions with other regions.

The measurement of development used so far, namely GDP in the national context and GDP in the regional context, can only capture economic development. For this reason, a more comprehensive indicator is needed which can capture not only economic consequences but also developments in social aspects and human welfare. The Human Development Index plays an essential role in economic development because good human development will make factors of production. The production factor in question is that an adequate level of education will create a workforce with the ability. With the level of education, it will provide opportunities to have the ability to manage existing resources so that it can address existing resources to increase economic growth.

Human development must participate in stimulating processes that can improve human resources' quality. The basis of this human development index is to see how important it is to pay attention to the quality of human resources. The human development index is a concept that underlies development to achieve human welfare as the ultimate goal of development. The conceptual research framework is the link or relationship between one concept and another of the problem to be studied. The conceptual framework is obtained from the science/theory concepts used as the basis of the research. The conceptual framework in this study the authors describe as follows
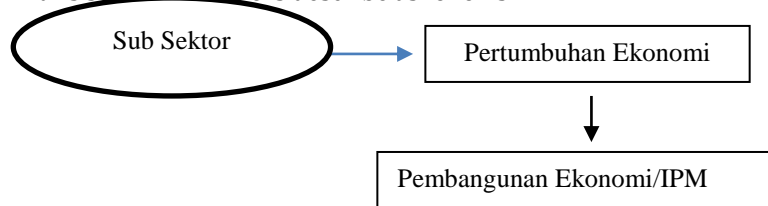
Figure Research Conceptual Framework

The hypothesis in this study is an associative hypothesis that emphasizes the asymmetrical aspect. Hypothesis testing in this study uses a two-way test. The hypothesis statement in this study is related to the second problem formulation, namely:

Second Problem Formulation

H1 = economic growth affects the human development index.

Hypothesis Acceptance Criteria

H1 is accepted if T count > t table or the significance value of P value <0.05

METHOD

The type of research used in this research is descriptive research with a quantitative approach. The data needed in this study is secondary data in the form of a time series from 2011 to 2021, which the authors obtained through reports published by the Central Bureau of Statistics and other related agencies.

The population in this study is data from regional economic indicators in 4 regencies in South Sulawesi Province. The samples used in this study are data on 17 sub-sectors from GDP contributors, economic growth data, and human development index data from 2011-2021.

To collect data and information, this study uses the documentation method. This method is carried out by taking data that support research, such as data on regional economic indicators such as GDP data obtained from the Central Bureau of Statistics and other related agencies. The analytical technique used by the author is quantitative analysis. The analytical tools used include:

1. **Location Quotient (LQ) analysis**

LQ analysis is used to determine a region's economic base, especially from the contribution criteria. The formula for the Location Quotient analysis is as follows:

$$LQ = \frac{X_i^R / X^R}{X_i / X} \dots\dots\dots\dots\dots\dots\dots\dots (1)$$

Information:

X_i^R	=	GDP Value of a Regency/City Sector
X^R	=	Nilai PDRB seluruh Sektor Kab/Kota
X_i	=	GDP Value of a Province-level Sector
X	=	GDP values for all sectors at the provincial level

Provision

If LQ > 1, then the sector is included in the base sector, meaning that the district's level of specialization is higher than that of the province.

If LQ < 1, then the sector is included in the non-base sector, meaning that the sector has a lower level of specialization than the provincial level.

If LQ = 1, then the district level of specialization is the same as the provincial level.

2. **Klassen Typology**

The Klassen Typology technique can be used to describe the pattern and structure of regional sectoral growth. This analysis bases the grouping of a sector by looking at the growth and contribution of certain sectors to the total Gross Regional Domestic Income of a region. By using the Klassen Typology analysis, a sector can be grouped into four categories, namely: prime sector, potential sector, developing sector, and underdeveloped sector. Determination of the category of a sector into the four categories above is based on the growth rate of sectoral contributions and the average sectoral contribution to GDP, which can be shown in the following matrix

Sectoral Average Contribution to GDP / Sectoral Average Growth Rate	Y sector > Y GDP	Y sector < Y GDP
r sector > r GDP	Prime Sector	Developing Sector
r sector < r GDP	Potential Sector	Back Sector

Information:

Y sector = contribution value of sector i

Y GDP   = average GDP

r sector   = growth rate of sector i

r GDP   = GDP growth rate

to measure the Average GDP Growth Rate

$$\overline{LP} = \frac{\sum Lp}{n} \dots\dots\dots\dots\dots\dots\dots\dots (2)$$

$$Lp = \left(\frac{y_i^t - y_i^0}{y_i^0}\right) * 100 \ \ldots\ldots \ \ldots..(3)$$

to measure the Average GDP Contribution

$$\overline{Cn} = \frac{\sum Cn}{n} \ \ldots\ldots\ldots\ldots\ldots\ldots .(4)$$

$$Cn = \left(\frac{y_i}{\sum Y}\right) * 100 \ \ldots\ldots\ldots\ldots (5)$$

Information:

$\quad$ (LP) $\ $ = Average GDP Growth Rate of sector i

$\quad$ (Cn) $\ $ = Average GRDP Contribution of sector i
$\quad$ yi $\quad$ = GDP value of sector i Regency in the base year
$\quad$ yit $\quad$ = GDP value of sector i Regency in the final year
$\quad$ ΣY $\quad$ = Total GDP in the year i

3. $\ $ Shift Share Analysis

$\quad$ We can use this approach to analyze shifts in the structure of the regional economy concerning an increase in the regional economy at a higher level. If sectors with slow growth dominate the regional economy, the regional economy will grow below the economic growth rate of the region above it. This analysis will look at sectoral growth in districts with the same sector at the provincial level. Shift share analysis consists of three components of the study, namely a) regional share, b) Proportionality Shift, c) differential shift. The formula for Shift Share analysis is as follows:

$$G_{ij} = R_S + P_s + D_S \ \ldots\ldots\ldots (6)$$

Information:

$\quad$ Gij $\ $ = Shift Share
$\quad$ Rs $\ $ = Regional Shares
$\quad$ Ps $\ $ = Proportionality Shift
$\quad$ Ds $\ $ = Differential (Local Share)

To use the analysis above, first value each formula

Regional Shares

$$Rs = \left[y_i \left(\frac{Y^t}{Y^0} - 1\right)\right] \ \ldots\ldots\ldots\ldots (7)$$

Proportionality Shift

$$Ps = \left[y_i \left(\frac{Y_i^t}{Y_i^0}\right) - \left(\frac{Y^t}{Y^0}\right)\right] \ \ldots\ldots\ldots (8)$$

Differential shift

$$Ds = \left[y_i \left(\frac{y_i^t}{y_i^0}\right) - \left(\frac{Y_i^t}{Y_i^0}\right)\right] \ \ldots\ldots (9)$$

Information :

$\quad$ Rs $\ $ = $\ $ Regional Shares
$\quad$ Ps $\ $ = $\ $ Proportionality Shift
$\quad$ Ds $\ $ = $\ $ Differential Shift
$\quad$ yi $\ $ = $\ $ GDP value of sector i Regency in the base year
$\quad$ yit $\ $ = $\ $ GDP value of sector i Regency in the final year
$\quad$ Yi0 $\ $ = $\ $ GDP value of sector i at the provincial level in the base year
$\quad$ Yit $\ $ = $\ $ GDP Value of a Sector at the Final Year Province

The decision criteria that can take for the Shift Share value are:

$\quad$ If the value (Rs) is positive, it means that sector i in the Regency/City is growing faster than the average growth in South Sulawesi Province. Conversely, if the value (Rs) is negative, sector i in Regency/City increases slower than the average growth in South Sulawesi Province.

$\quad$ If the value (Ps) is positive, it means that sector i is progressing, and the sector is growing faster than the overall growth. Conversely, if the value (PS) is negative, it means that sector i is a sector that grows slowly.

$\quad$ If the value (Ds) is positive, sector i has high competitiveness in the Regency/City. Conversely, if the value (C) is negative, it means that sector i does not have competitiveness in the communities in South Sulawesi

4. $\ $ Regression Analysis

$\quad$ Regression analysis is used to answer the second problem formulation with the following equation:

$$Y = \partial + \beta 1x1 \ \ldots\ldots\ldots\ldots\ldots\ldots (10)$$

Description
- Y = Human Development Index
- a = Constant
- b = Regression Coefficient
- X = Economic Growth

The overall regression analysis can be seen in the following aspects

a. Classical Assumption Test

Data Normality Test

The normality test was carried out to see whether, in the regression model, the dependent variable and the independent variable both have a normal distribution or not; a good regression model is normally distributed. Because in this study, the authors used time series data, the normality test tool was the value of the skewness and kurtosis ratios. The distribution is not normal if the calculated Z value > Z table. To determine the proportion of skewness and kurtosis, the equation used is

$$ZSkew = \frac{S}{\sqrt{6/N}} \ldots\ldots\ldots\ldots\ldots\ldots 11$$

$$ZKur \frac{K}{\sqrt{24/N}} \ldots\ldots\ldots\ldots\ldots\ldots\ldots 12$$

If the skewness and kurtosis ratio values are in the range of -1.96 to 1.96, then the data is normally distributed (Ghozali, 2018). Normality test results of the data obtained Stat Skewness value .230 Stat Kurtosis value .802 Z Skew value 0.297 < 1.96 and ZKurt value 0.517 < 1.96 of these values can be categorized as normal at a significance value of 0.05

Linearity Test

The linearity test is one of the classical assumption tests conducted to determine the linear nature of the distribution of data between variables X and Y. It is necessary to know whether the linear nature of the X and Y relationship affects the validity or not of the resulting regression model.

b. Coefficient of Determination

The Coefficient of Determination Test (R-Squared) is a test to explain the magnitude of the variation of the dependent variable defined by the independent variable. In addition, the coefficient of determination test can also be used to measure how well our regression line is. Suppose the value of the coefficient of determination (R-squared) in an estimate is close to one (1). In that case, it can say that the independent variable well explains the dependent variable. And conversely, if the coefficient of determination (R-Squared) is away from one (1) or close to zero (0), the less well the independent variable explains the dependent variable.

c. T Test (Partial Test)

The t-test (t-test) tests the regression coefficients partially. This Test is conducted to determine the partial significance of the role of the independent variable on the dependent variable by assuming that the other independent variables are considered constant. The basic concept of the T-test is to compare the calculated T value with the T table value (Sugiyono, 2017). To get the value of T, compute the formula used, namely

$$T_{hit} = \frac{r\sqrt{n-k-1}}{\sqrt{1-r^2}} \ldots\ldots\ldots\ldots\ldots (13)$$

Description
- r = correlation value
- N = Number of Samples
- K = number of independent variables
- r2 = coefficient of determination

RESULTS AND DISCUSSION

Economic Base, Economic Structure, And Competitiveness

An area or region is inseparable from economic problems. The basic theory is one of the theories or concepts developed by some economists to reduce these problems. The economic basis theory states that the magnitude of the increase in exports from that region determines the economic growth rate in an area. This basic theory is classified into two sectors: the base sector and the non-base sector. A region's primary and non-economic base sectors can be determined using Location Quotient (LQ) analysis. The LQ method is used to study a region's economic conditions, which leads to the identification of specializations/bases of economic activity by using GRDP data as an indicator of a region's growth.
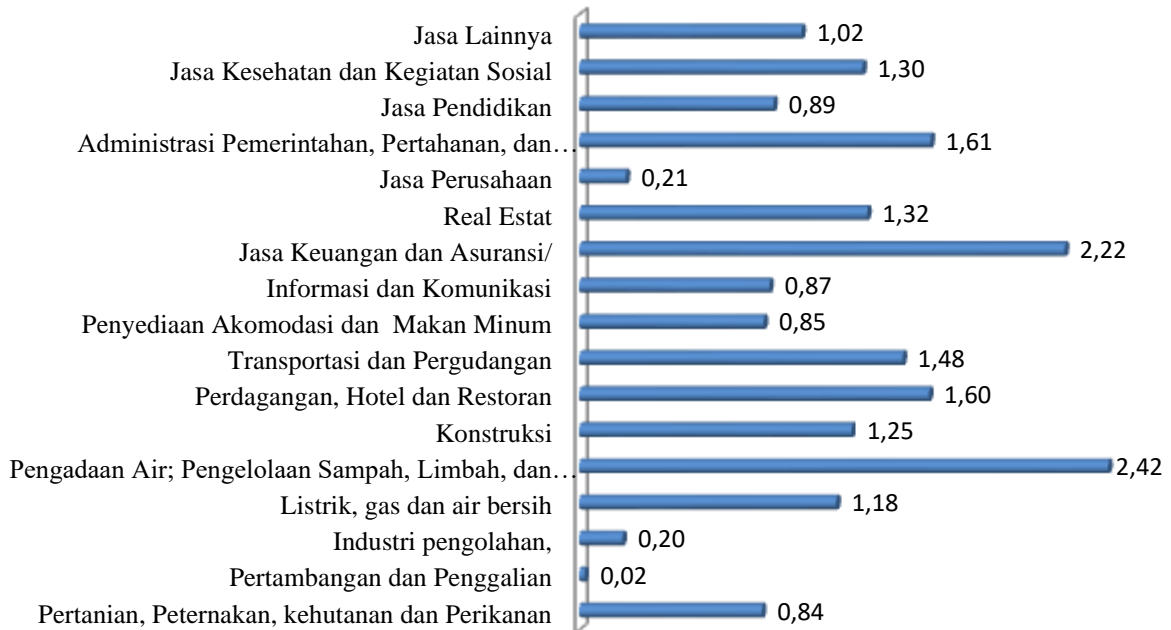
Graph 3 Average Location Quotient for 2011-2021
Source: Central Statistics Agency Palopo City, (processed)

The graph above provides information that of the 17 GRDP Sub-Sectors of Palopo City in 2011-2021, ten sub-sectors are the economic basis of Palopo City with an LQ value of > 1, and Seven sub-sectors that are non-base. The sub-sectors that are the basis of the Palopo City economy are (1) Electricity, gas, and clean water, (2) Water Supply, Waste Management, Waste and Recycling, (3) Construction, (4) Trade, Hotels and Restaurants, (5)) Transportation and Warehousing, (6) Financial and Insurance Services, (7) Real Estate, (8) Government Administration, Defense, and Compulsory Social Security, (9) Health Services and Social Activities (10) Other Services. While the subsectors that are categorized as a non-economic base are (1) Agriculture, Livestock, Forestry, and Fishery, (2) Mining and Quarrying, (3) Processing Industry, (4) Provision of Accommodation and Food and Drink, (5) Information and Communication, (6) Company Services, (7) Education Services.

Apart from the Location Quotient (LQ) analysis, another analytical tool that can describe the pattern and growth of the economic sectors of each region is the Klassen Typology. Klassen's Typology Analysis classifies a sector into four categories, namely: prime industry, if it has high growth and a significant contribution, indicates that the sector is very dominant in the regional economy; potential industry, with slow growth but a significant contribution; meaning that the sector is experiencing a decline; developing industry if the change is substantial, but the gift is low, it suggests that the industry is experiencing improvement and can be accelerated; and lagging sectors, if growth is slow but contribution is low, indicating that the industry has less potential.

Tabel 1 Matrix Typology Klassen

Sectoral Contribution	Sectoral Growth	
	Y Sektor > Y GDP	Y Sektor < Y GDP
Y Sektor > GDP	1. Listrik, gas dan air bersih 2. Perdagangan, Hotel dan Restoran 3. Transportasi dan Pergudangan	1. Pengadaan Air; Pengelolaan Sampah, Limbah, dan Daur Ulang 2. Konstruksi 3. Jasa Keuangan dan Asuransi 4. Real Estate 5. Administrasi Pemerintahan, Pertahanan, dan Jaminan Sosial Wajib 6. Jasa Kesehatan dan Kegiatan Sosial 7. Jasa Lainnya
Y Sektor < GDP		1. Pertanian, Peternakan, kehutanan dan Perikanan

	2. Pertambangan dan Penggalian
	3. Industri pengolahan
	4. Penyediaan Akomodasi dan Makan Minum
	5. Informasi dan Komunikasi
	6. Jasa Perusahaan
	7. Jasa Pendidikan

Source: Central Statistics Agency Palopo City, (processed)

The results show that of the 17 GRDP sub-sectors of Palopo City in 2011-2021, three sub-sectors are located in quadrant I, categorized as prime sectors. There are seven sub-sectors in quadrant II, classified as developing sectors, and sub-sectors in quadrant IV, categorized as underdeveloped sectors totaling 7.

The sub-sectors categorized as prime sectors are (1) Electricity, gas, and clean water, (2) Trade, Hotels, and Restaurants; and (3) Transportation and Warehousing. The number of sub-sectors categorized as developing sectors is (1) Water Procurement; Garbage, Waste, and Recycling Management, (2) Construction, (3) Financial Services and Insurance, (4) Real Estate, (5) Government Administration, Defense and Compulsory Social Security, (6) Health Services and Social Activities), and (7) Other Services, and sub-sectors which are categorized as underdeveloped sectors, namely (1) Agriculture, Livestock, Forestry and Fisheries, (2) Mining and Quarrying, (3) Processing Industry, (4) Provision of Accommodation and Food and Drink, (5) Information and Communication, (6) Company Services, (7) Education Services. Meanwhile, to determine changes in economic structure and sector shifts in the economy, the analysis tool that can be used is Shift Share Analysis. This analysis is to determine changes in the financial system and sectoral shifts in the economy of the study area towards the economic structure of a higher reference area (provincial or national).

This analysis uses three essential pieces of information that are related to one another, namely: the provincial economic growth (Province Growth Effect), which shows the effect of regional economic growth on the regional economy; proportional Shift, leading the relative change in the performance of a sector in a specific area to the same industry at the top level; and differential Shift (Differential Shift), to determine how far the regional industry's competitiveness is against the economy that is used as a reference. Suppose the differential Shift of one sector is positive. In that case, the industry's competitiveness is higher than that of the same sector in the economy, which is used as a reference.

Table 2 Shift share analysis of the Palopo City GRDP sub-sector in 2011-2021

No	Sektor	Rs	Ps	Ds	Dij
1	Pertanian, Peternakan, kehutanan dan Perikanan	606,203	(161,467)	(225,672)	219,064
2	Pertambangan dan Penggalian	4,771	(2,692)	(553)	1,525
3	Industri pengolahan,	85,425	(8,967)	39,377)	37,081
4	Listrik, gas dan air bersih	2,497	807	60	3,364
5	Pengadaan Air; Pengelolaan Sampah, Limbah, dan Daur Ulang	8,704	(2,580)	(262)	5,862
6	Konstruksi	434,819	5,156	(222,449)	297,526
7	Perdagangan, Hotel dan Restoran	456,578	136,486	332,340	925,405
8	Transportasi dan Pergudangan	136,192	(58,351)	40,729	118,570
9	Penyediaan Akomodasi dan Makan Minum	31,097	(618)	(4,591)	25,888
10	Informasi dan Komunikasi	130,290	140,032	(36,742)	233,580
11	Jasa Keuangan dan Asuransi	171,572	67,707	(36,136)	203,142
12	Real Estate	122,396	8,550	(7,052)	123,894
13	Jasa Perusahaan	2,620	(257)	(266)	2,097
14	Administrasi Pemerintahan, Pertahanan, dan Jaminan Sosial Wajib	220,294	(81,991)	(2,217)	136,087
15	Jasa Pendidikan	136,843	26,667	(47,963)	115,547
16	Jasa Kesehatan dan Kegiatan Sosial	63,419	33,917	(16,392)	80,945
17	Jasa Lainnya	40,005	(300)	(10,254)	29,451

Source: Central Statistics Agency Palopo City, (processed)

The table above in the Regional Share (RS) column for all sub-sectors has a positive value. This explains that all GRDP sub-sectors for Palopo City are growing faster than the average growth for South Sulawesi Province. In the Proportionality Shift (PS) column, there are eight sub-sectors with positive values, namely (1) Electricity, gas, and clean water, (2) Construction, (3) Trade, Hotels, and Restaurants, (4) Information, and Communication, (5) Financial Services and Insurance, (6) Real Estate, (7) Education Services, (8) Health Services and Social Activities. This means that the eight GRDP sub-sectors of Palopo City are growing faster than the overall growth. Even so, there are still 9 GRDP sub-sectors for Palopo City, which are growing slower than the overall growth. In the Differential Shift (DS) column, there are four positive sub-sectors, namely (1) manufacturing industry, (2) gas electricity and clean water, (3) commerce, hotels, and restaurants, and (4) transportation and warehousing. This means that the four GRDP sub-sectors of Palopo City have good competitiveness compared to other GRDP sectors in Palopo City. The remaining 13 sub-sectors are negative, so these sectors are not competitive in the GRDP sub-sector of Palopo City.

The Effect of Economic Growth on the Economic Development Index

The perspective of human development is a radical thought in the concept of development. This concept replaces the images of economic growth and per capita income growth used by policy planners. Economic growth sees humans as a tool to achieve growth, not as a development goal. In general, the Human Development Index provides a valuable picture of the level of development of a region and helps in determining a better direction of growth in the future. Likewise, the Condition of the Development Index in the City of Palopo describes the development that has been carried out apart from a measure of economic growth.
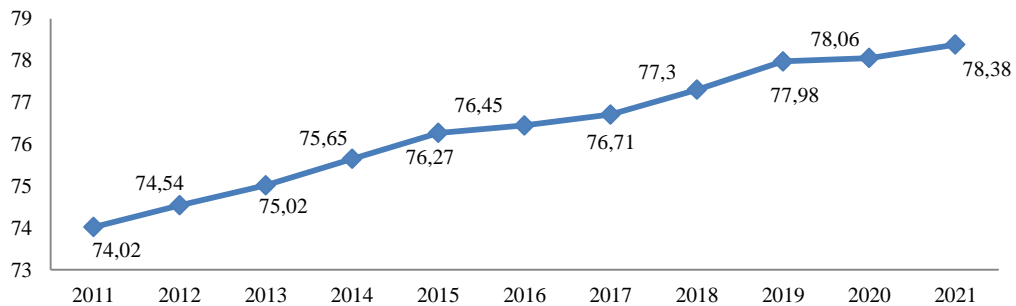
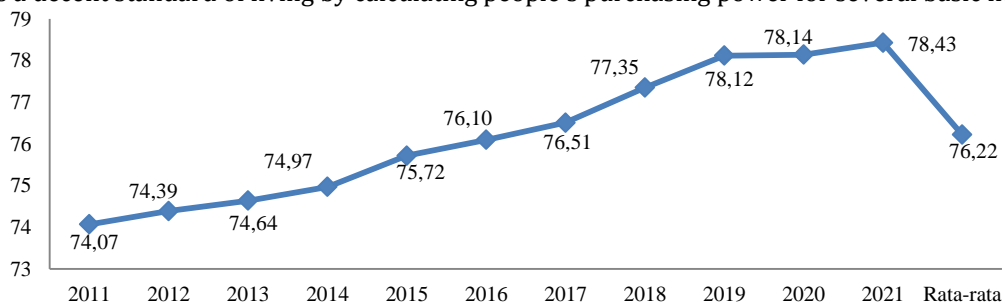Graph 4 Purchasing Power Index for the City of Palopo for 2011-2021
Source: Central Statistics Agency Palopo City, (processed)

The graph above shows that the condition of the Human Development Index in Palopo City has increased yearly, with the highest value reaching 78.38, indicating the moderate category. Therefore the Government and related stakeholders must have programs that can increase the value of the Human Development Index. The achievement of the Human Development Index is an aggregation of three dimensions, namely the health dimension, the education dimension, and the economic Dimension.

Economic Dimension

Purchasing Power Index

Purchasing power is the ability of people to spend their money in the form of goods or services. Purchasing power describes the level of welfare enjoyed by the population due to the improving economy. An index is used to measure people's purchasing power, known as the purchasing power index. This index measures a decent standard of living by calculating people's purchasing power for several basic needs.
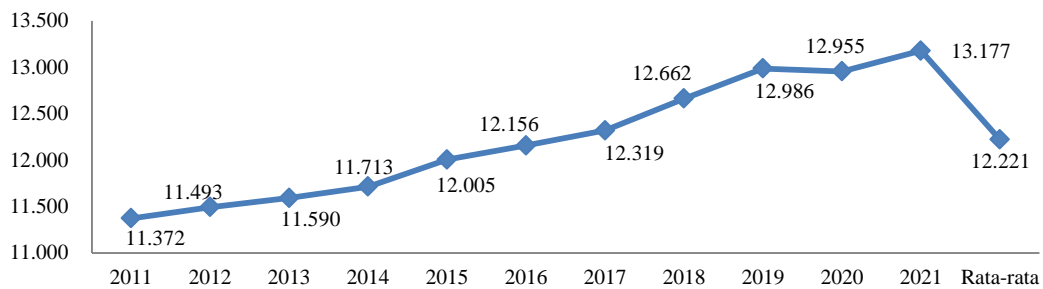

Graph 5 Purchasing Power Index for the City of Palopo for 2011-2021
Source: Central Statistics Agency Palopo City, (processed)

The graph above shows that the purchasing power index for Palopo City fluctuates yearly. Still, if averaged over the last ten years, the purchasing power index for Palopo City is 76.22 percent, categorized in the moderate index.

Purchasing Power Parity

Purchasing Power Parity (Purchasing Power Parity) impacts the inflation rate relative to the exchange rate. The purchasing power parity theory focuses on the relationship between inflation and the exchange rate, which will adjust from time to time to reflect the difference in inflation between the two countries. As a result, the purchasing power of consumers to buy domestic products will be the same as their purchasing power to buy domestic products. Foreign products. (Madura, 2000)


Graph 6 Purchasing Power Parity of Palopo City in 2011-2020 (thousands)
Source: Central Statistics Agency Palopo City, (processed)

The graph above provides information on the purchasing power parity of Palopo City, with an average Purchasing Power Parity of Rp. 12,221. The purchasing power parity value shows that the people's purchasing power parity is less than 1 US$ (exchange rate 14,363.75).

Education Dimension

The Nine-Year Compulsory Education Program implemented by the government in 2009 positively impacted society. People from the lower middle class who cannot afford the high cost of education can get higher education, namely at the junior high school level, free of charge.With the nine-year compulsory education program, people are fostered better. They are expected to be able to compete in the world of work, so the government hopes for this program to help reduce the unemployment rate. The education factor will be an essential investment to increase regional competitiveness in the future. The education index reflects the development results in the education sector. The indicators forming the education index are the Expected Years of Schooling and Average Years of Schooling. The Old School Expectancy Rate (HLS) is defined as the length of schooling (in years) expected to be experienced by children at a certain age. At the same time, the average teaching size is the years residents undergo formal education.
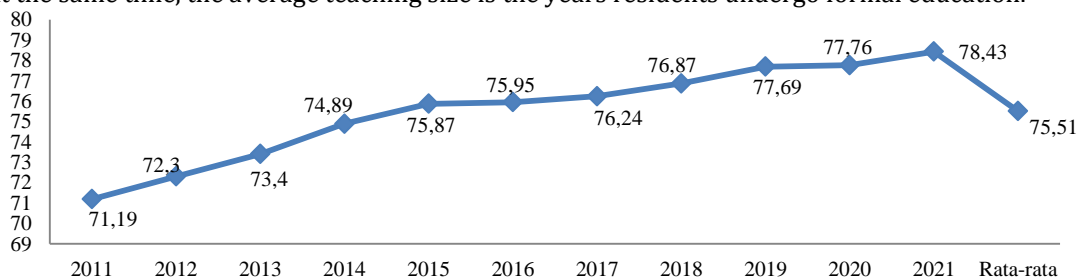
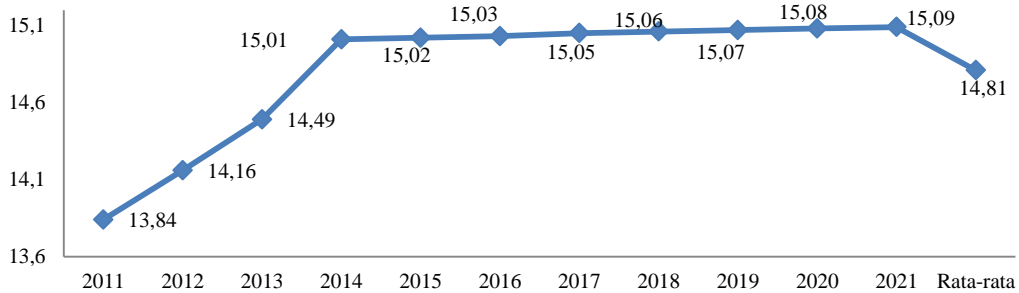Graph 7 Education Index for the City of Palopo for 2011-2021
Source: Central Statistics Agency Palopo City, (processed)

The graph above shows that the average Palopo City index has increased yearly, with an average Education Index in the last ten years of 75.51 percent. The achievement of the education index in each region can be seen by measuring the expected length of schooling and the average number of years attended by the community in that area.

Old School Expectations

Expected Old School is defined as the length of School (in years) scheduled to be experienced by children at a certain age. It is assumed that the probability that the child will remain in School at the following ages is equal to the likelihood of the population attending School per population for the same period. Expected Old School is calculated for residents aged seven years and over. HLS can be used to

determine the condition of the development of the education system at various levels, which is shown in the length of education (in years) expected to be achieved by each child. The maximum limit for the expected years of schooling is 18 years, while the minimum is 0 (zero).
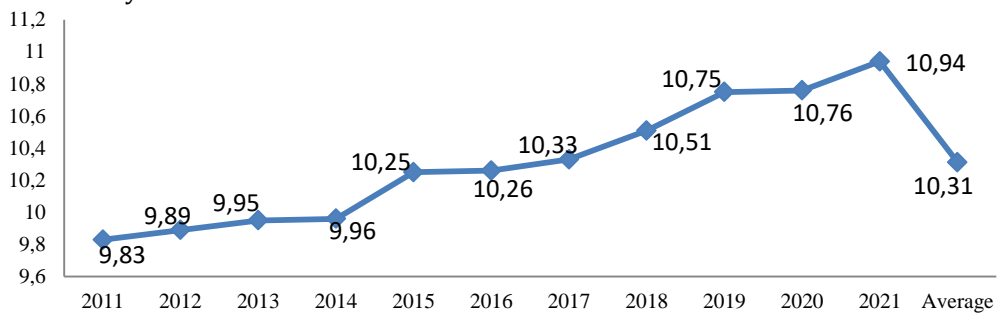

Graph 8 Long Expectation Index for Palopo City Schools in 2011-2021
Source: Central Statistics Agency Palopo City, (processed)

The graph above shows that the Average Old School Expectancy Rate in Palopo City has increased every year from 2011-2021. With an average Old School Expectancy score of 14.81 or the equivalent of 21-22 years of age or the equivalent of Diploma III Education level.

Average Years of Schooling

The average length of schooling describes the years used for residents aged 15 years and over in formal education. The calculation of the average instruction size uses two limits that are used according to the agreement of several countries. The average length of schooling has a maximum limit of 15 years and a minimum limit of 0 years.


Graph 9 Average School Years in Palopo City 2011-2021
Source: Central Statistics Agency Palopo City, (processed)

The graph above shows that the average length of schooling in Palopo City is 10.31. This means that the average length of schooling for residents of Palopo City is ten years or the equivalent of 25 years of age and is also equivalent to the level of Masters S-2 to Strata Education S-3.

Health

One of the dimensions measured in human development is the health dimension, in which health development is one of the development efforts aimed at achieving optimal health status. Optimal health is where the well-being of body, soul, and society allows everyone to live productively, socially, and economically. To measure the health dimension, the community life expectancy index is used.
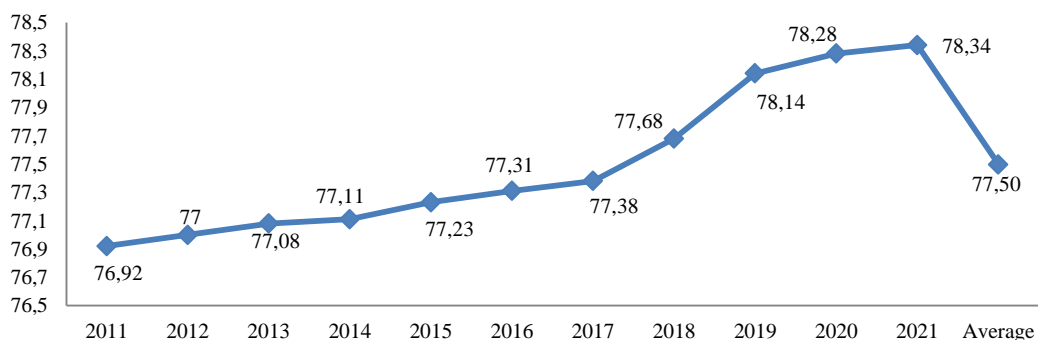
Graph 9 Palopo City Health Index for 2011-2021
Source: Central Statistics Agency Palopo City, (processed)

The graph above provides information that the Palopo City Health Index has increased every year from 2011-2021 with an average value of 77.41 which is in the medium category. In addition to the health index above, the measure to see the degree of public health in an area can be seen by measuring life expectancy as a tool for evaluating government performance in improving the welfare of the population in general and improving health status in particular. Based on data from the World Health Organization (WHO), the standard maximum life expectancy is 85 years.
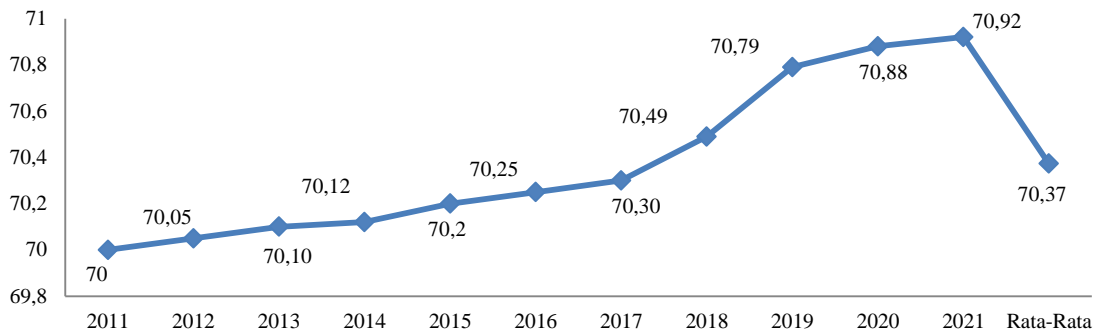
Graph 10 Life Expectancy for the City of Palopo in 2011-2021
Source: Central Statistics Agency Palopo City, (processed)

The graph above provides information that Life Expectancy in Palopo City has increased every year from 2011-2021. The average life expectancy is the highest in Palopo City, with a value of 70.32, equivalent to 70-71 years. The WHO standards related to community life expectancy are still smaller than the WHO standard life expectancy set at 85 years.

Theoretically, economic growth greatly influences economic development in an area where good economic growth can encourage the creation of infrastructure that triggers many industries and public facilities, such as education and health facilities, promoting a high human development index. To see this influence below, we describe the regression test results on the effect of economic growth on the Human Development Index, which is the parameter of the Economic Development of the City of Palopo.

Table. 3 Regression Test of Economic Growth on HDI in Palopo City

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.562[a]	.316	.240	1.83622
a. Predictors: (Constant), HDI				

Coefficients[a]		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	67.795	30.128		2.250	.051
	HDI	-.803	.394	-.562	-2.037	.072
a. Dependent Variable: Economic Growth						

The table above explains that in the determination coefficient test, the value of R Square (R^2) = 0.316. This shows that the effect of economic growth on the Human Development Index in Palopo City is 31.6 percent, shows that the impact of economic growth is still minimal, and this is also strengthened by looking at the regression coefficient table, which offers a negative effect with the acquisition of a value of Y = 67,795 – 0,803. The value displayed indicates that when economic growth in Palopo remains (0), the HDI is 67,795. In contrast, if economic growth in the town of Palopo increases by one percent (1%), the HDI will decrease by 0.803 percent. So it can be concluded that if the economic growth of Palopo City increases, the HDI of Palopo City will decrease. Thus the results of the analysis also explain that the

hypothesis in this study, which states that Economic Growth has a positive and significant effect on the human development index, is rejected based on decision-making from the Tcount value (-2.037) < T table (2.262) and the P value significance value (0.072) > 0.05.

From the results of the analysis above, it was found that the effect of economic growth on the Human Development Index hurts the Human Development Index; this result is not in line with the results of previous studies, which found a positive effect, as in research conducted by (Maulana & Bowo, 2014), (Imron & Satria, 2018), (Nainggolan et al., 2021) which states that economic growth has a positive effect on the increase in HDI. In addition, the analysis above also confirms the results of research conducted by Herman, who found that economic growth hurts the increase in HDI (Herman, 2017). Even though normatively, we understand that when economic growth is high, the Development Index should also be increased, this often does not happen because sometimes economic growth in an area is increased. Still, the problems of economic development, especially human development, are not in line, for example, high poverty rates and low levels of education.

In the theory of economic growth, there is a clear link between human development and economic growth; It can be understood from two directions, namely, the effect of economic growth on human development and the impact of human development on economic growth. The linkage between economic growth and human development cannot be considered linear or direct but is determined by the extent to which the factors linking the two concepts play a role (Muhammad et al., 2010).

However, it should be remembered that an increase in the HDI does not always follow economic growth and must be supported by a sustainable and just development pattern. Economic growth affects HDI if a) Economic growth leads to an increase in the average income of the community, which in turn can improve the quality of life and increase access to essential services such as education and health, 2) Economic growth helps in financing infrastructure development such as roads, electricity, clean water, and transportation, which are essential factors in improving people's quality of life, 3) Stable and sustainable economic growth can help reduce poverty levels and improve income distribution 4) Economic growth helps in financing education, which is an essential factor in enhancing the quality life and improve HDI 5) Economic growth helps in financing quality health services, which can enhance the quality of life and reduce mortality rates.

CONCLUSION

Palopo City has an economic base of 1) Electricity, gas, and clean water, (2) Water Supply, Waste Management, Waste, and Recycling, (3) Construction, (4) Trade, Hotels, and Restaurants, (5) Transportation and Warehousing, (6) Financial and Insurance Services, (7) Real Estate, (8) Government Administration, Defense, and Compulsory Social Security, (9) Health Services and Social Activities (10) Other Services. Although the sub-sectors that are competitive in Palopo City are (1) the processing industry, (2) gas electricity and clean water, (3) trade, hotels, and restaurants, (4) transportation and warehousing, this research also concludes that economic growth in Palopo City does not influence the Human Development Index.

Suggestions For further research on economic growth on the Human Development Index (IPM), the following are some suggestions: 1) Focusing research on regions with different levels of economic growth to obtain more comprehensive results 2) Researchers must take into account other factors of government public policies that lead to an increase in HDI such as education level, quality of life, and increase in people's income 3) Researchers can compare the results of research with other countries to obtain a broader picture of the effect of economic growth on HDI.

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