Exploring New Sources of Economic Growth Amid The Covid-19 Pandemic

EcceS:
Economics Social and Development Studies

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## Abstract: Exploring New Sources of Economic Growth Amid the Covid-19 Pandemic

Economic growth as a macroeconomic indicator that becomes a benchmark for a region can be seen from the increase in the income per capita of its population and the increase in production activities in various economic business fields. The magnitude of the economic potential of Makassar City is not directly proportional to the existing economic growth. The government seems unable to reproduce new sources of growth and this is exacerbated by the post-Covid-19 virus exposure. This is a problem for accelerating the city's economic growth. The novelty of this research tries to explore further the potential sources of new economic growth in Makassar City which is seen from sectoral contributions, namely the education sector, tourism sector, industrial sector, and trade sector. The purpose of this study describes the influence of the contribution of the education sector, tourism sector, industrial sector, and trade sector on economic growth in Makassar City. The data used in this study is secondary data obtained from the Central Statistics Agency in Makassar City. The analysis technique used is multiple linear regression analysis with the help of SPSS 23 software. The results show that the variables of education, industry, and trade have a positive and significant impact on economic growth in Makassar City. However, the tourism sector has no effect on economic growth in Makassar City. The implication of the research is that the government should strive to increase economic growth, by accelerating potential productive sectors, as the findings of this research, namely the education, trade and industry sectors, as a new source of economic growth for Makassar City. This is the focus so that in the future the city's economy will improve and become part of the economic recovery strategy agenda after the Covid-19 case.

Keywords: Covid-19; Education; Growth; Industry; Trading

INTRODUCTION

Economic growth is one of the barometers of the economic progress of a region, where it can be seen from the average value of sectoral growth calculated through Gross Regional Domestic Product (GRDP), indicating that there is economic growth in aggregate at the sectoral growth rate (Jorda et al., 2017; Li et al., 2020; Saputri and Anwar, 2019). Makassar City's economic growth has been dominated by three sectors, namely the trade, manufacturing and construction industries. The dominance of this sector has been quite strong in the last five years, from 2016 to 2020. Even though this city has enormous potential resources, there are even many economic sectors that have not been able to be optimized, to encourage the economic growth of Makassar City. This issue becomes a new chapter for the government to seek new sources of economic growth, so that Makassar City's economic growth will be even more accelerated. Especially, after the outbreak of the Covid-19 pandemic that hit all lines of the city's economy. This momentum should be a turning point for the Makassar City government, to encourage new sources of growth amid the current uncertain economic conditions.

Figure 1. Contribution of Trade, Education, Tourism and Manufacturing Industry to Makassar City's Economic Growth in 2016-2020 (Percent)
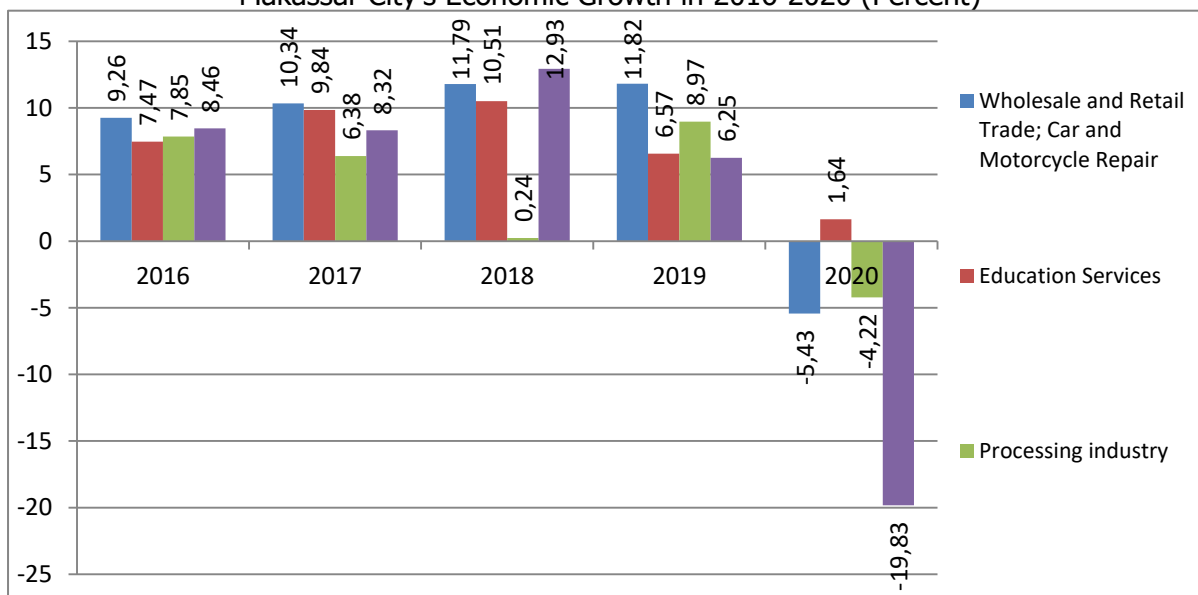
Source: BPS Makassar, 2020.

The Statistic Office of Makassar (BPS) confirm that the contribution of the trade sector to Makassar City's economic growth from 2016 to 2019, shows an impressive trend. From year to year, there has been a significant and consistent increase. However, entering

2020 the growth of this sector fell to its lowest point in the last five years, with a minus growth of -5.43 percent. This condition certainly weakens the economic growth of Makassar City, because this sector is the mainstay sector that has been supporting the regional economy. This is caused by the outbreak of the Covid-19 pandemic in this area, which has hampered the transmission of this sector in various places in Makassar City (BPS Makassar, 2020).

The same is true for the manufacturing sector. This sector is the second largest contributor after the trade sector, which contributed to Makassar City's economic growth of 8.97 percent in 2019. Entering 2020, this sector also experienced minus -4.24 percent growth (BPS Makassar, 2020). Thus, the manufacturing sector which has been driving the city's economy has contracted to its lowest point in the last five years. This situation has contributed to worsening the achievement of economic development, which the government has been trying to achieve.

The city of Makassar is not only known as a commercial and industrial city in the eastern part of Indonesia, it is also a tourist destination city. This is indicated by the contribution of the tourism sector in driving the economic growth of this region. From 2016 to 2018, this sector grew above 8 percent so that it became a mainstay sector for the government and is expected to contribute a lot of revenue to this region. Entering 2020, this sector contracted at its lowest level in five years, standing at -19.83 percent (BPS Makassar, 2020).

In contrast to the education sector, it experienced positive growth during the Covid-19 pandemic. The sector was able to penetrate the 1.64 percent figure amid exposure to this outbreak. Even this sector has helped lift Makassar City's economic growth after the outbreak of the Covid-19 pandemic. This situation confirms that the mainstay sector which has been driving Makassar City's economic growth, cannot do much to lift the growth of this area to a better position amid the Covid-19 pandemic. However, the sector that has so far not been very reliable actually contributes positively to the Makassar City government, namely the education sector.

BPS data noted that there was a contraction in household consumption growth during the pandemic period of -0.61 percent or decreased from Rp. 58.88 trillion in 2019 to Rp. 58.52 trillion in 2020, the worst in recent years. Before the pandemic, household consumption in Makassar City grew steadily above 5 percent, even in 2017 it had reached

6.12 percent (BPS Makassar, 2020). The pandemic period has disturbed households due to two things, namely a decrease in household income and limited space for consumption based on a survey of the LIPI Economic Research Center. The decline in income was caused by the impact of the pandemic on the labor market such as layoffs, workers being laid off without pay, workers being laid off with salary cuts, etc., while the limited space for consumption was due to the Large-Scale Social Restrictions (PSBB) policy, where Makassar City is one of the regions in Sulawesi. The South has implemented this policy to suppress the spread of the virus.

Table 1
Makassar City Economic Growth Based on Annual Expenditure 2016-2020 (%)

Expenditure Component	2016	2017	2018	2019	2020
Household consumption	5,48	6,12	5,84	5,98	-0,61
LNPRT consumption	3,18	6,93	16,58	33,90	-4,29
Government Consumption	-1,40	1,53	7,04	-0,14	-2,64
Gross Domestic Fixed Capital Formation	7,35	8,81	7,29	6,84	1,71
Inventory Change	-33,62	46,37	0,00	-	-
Export of Goods and Services	16,22	8,94	12,16	-	-
Less Imports of Goods and Services	5,39	8,94	5,75	-	-
Growth	8,03	8,23	8,42	8,79	-1,27

Sumber: BPS Makassar, 2020

Figure 2

Makassar City Household Average Per Capita Real Expenditure 2016-2020
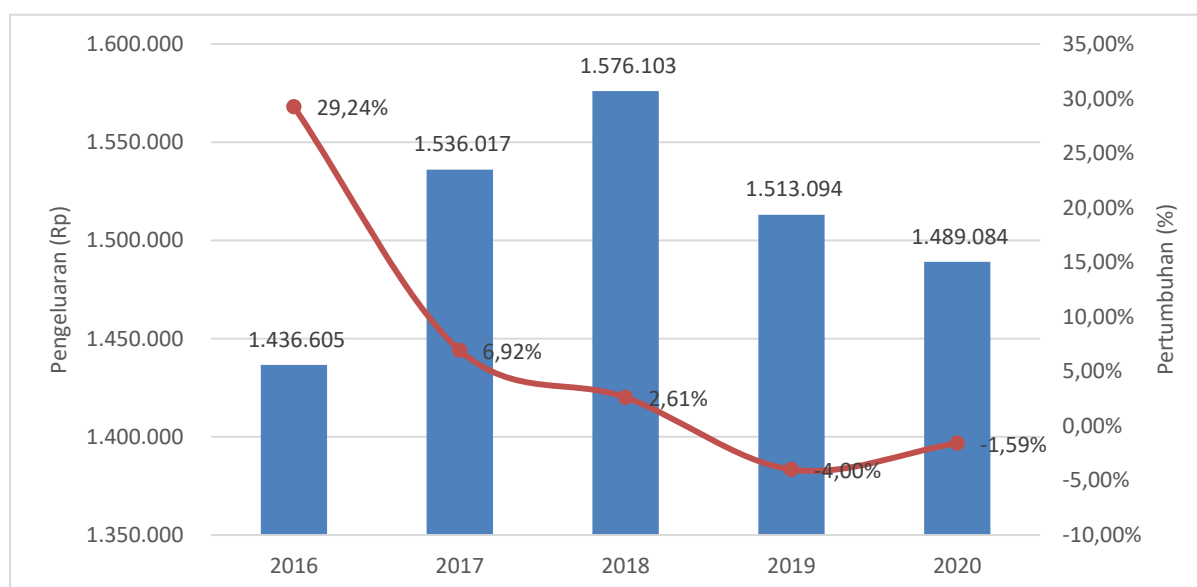
Sumber: BPS South Sulawesi, 2020

Makassar City household consumption based on data on real expenditure per capita on average per month has actually shown poor performance in the last five years. In 2016,

the average household in Makassar City spent Rp. 1,436,605 per month to meet the needs of food and non-food with a growth rate of 29.24 percent. The nominal figure has consistently increased to Rp. 1,536,017 in 2017 and Rp. 1,576,103 in 2018, but its growth slowed to only 6.92 percent and 2.62 percent, respectively. Instead of increasing, in 2019 the average monthly household expenditure fell to Rp. 1,513,094 with a growth of -4 percent. The pandemic in 2020 made household consumption weaker because households only spent Rp. 1,489,084 monthly average or depreciated -1.59 percent (BPS South Sulawesi, 2020).

Several research results show that economic growth is influenced by sectoral contributions based on GRDP, namely the education, industry, trade, and tourism sectors. Research result Alshammary et al., (2020) suggests that the contribution of the education sector has a positive and significant impact on economic growth. The improvement in the contribution of the education sector, helps to move the education service sector so that it has an impact on improving the wages received so that it shows results for individuals, the higher the productivity of the individual, the more people who have a better per capita income, so that the national economy will develop well (Ave, 2011; Banerjee, 2013; Chunyu and Yuxuan, 2013; Deskins et al., 2008; Dutt and Veneziani, 2011; Klugman et al., 2011; Sabermahani et al., 2013; Salg, 2013). However, this finding contradicts Deskins et al., (2008) that education is not able to contribute much to growth in the short term, because education takes a long time to contribute to economic development and growth.

The contribution of the tourism sector through the trade, hotels and restaurants sector which has increased from year to year can help in improving the economy. This is in line with the results carried out by (Li, 2020) found that tourism is very influential on economic growth because archipelagic countries have many tourism objects so that income and taxes can boost regional growth. The tourism sector, which has a lot of contact with the creative economy sector, is able to accelerate the economy (Alavi et al., 2019; Bloom et al., 2020; Dronyuk et al., 2019; Kiroff, 2019; Sigurdardottir and Candi, 2019; Tao et al., 2019). However, in contrast to the results of research conducted (Fahmi, 2019) shows that the tourism sector has a negative influence on economic growth. The tourism sector is not able to drive large investments, as is the existence of the manufacturing sector and the construction sector which have a high return of capital.

The industrial sector has an important role in national economic development as can be seen from the contribution of each sub-sector to gross domestic product or to the rate of national economic growth. The results of research conducted (Loecker, 2017) suggests that there is a positive influence of the industrial sector on economic growth. A high rate of economic growth depends on higher investment, where most industrial sectors are able to bring large investments into an area (Autor et al., 2020; Bustos et al., 2020; Helm, 2020; Kline et al., 2019; Lestari, 2020; Mufidha, 2019). This is different from the results of research conducted (Bustos et al., 2020) that the industrialization that occurs at the level of the agricultural industry increases income and savings, only that income is not reinvested in the country, the capital accumulation that occurs is taken out by investors. The novelty of this research, tries to explore further related to the potential that exists in Makassar City, especially sectoral contributions that have the potential to create new sources of economic growth for the city's economy. This is further seen through the acceleration of the existing sectoral contribution, in its role in contributing to the existing economic growth.

THEORETICAL REVIEW

Bejan (in Jhingan, 2020) argues that the problem of economic growth faced by developing countries is that the use of existing resources to drive the economy has not been maximized, because the use of these resources is still very limited, while in developed countries economic growth continues to increase from time to time, considering that existing resources have been able to be increased to a limited extent. Thiede et al., (in Mankiw, 2020) argues that economic growth can generate additional income for the community in a certain period, which can be seen from the increasing economic activity. Economic growth is an activity in a developing economy, so that it can become goods and services produced by the population, which has an impact on the improvement and welfare of the population (Bejan et al., 2020; Geiger et al., 2020; Kotschy and Sunde, 2021; Ridzuan et al., 2021; Stähler, 2021; Thiede et al., 2020).

In contrary to Rostow (in Majumdar, 2018) In explaining economic growth there are five stages of economic growth, namely, the first phase of traditional society. Traditional society is where an area there is a lot of land that can be cultivated, the product can be increased in accordance with population growth. Second, the pre-requisite take-off phase. At this stage there is a transition period in which the prerequisites for self-supporting growth are created or built. The prerequisites for other self-help growth are being created slowly.

The prerequisite is done by changing the old traditional society with modern society. Third, the take-off stage is the point of determining the growth that occurs in a society in life, by achieving normal conditions, dealing with institutions in modern times. Rostow defines take-off as an industrial change that is directly related to a very basic change, in an effective production method that determines economic growth. This important interrelated condition is a requirement for the take-off stage, namely an increase in several industrial sectors with high growth rates. The economic potential caused by trade liberalization activities is able to create continuous growth (Kurnia, 2017; Passas, 2017; Peck, 2017; Shammas, 2018).

One of the important conditions at the take-off stage is the increase in expenditure per capita which must exceed the rate of population growth, so that a higher level of per capita income in the economy can be maintained. Rostow stated the urgency of developing important sectors, namely the primary growth sector; explore new or unprocessed sources to be able to generate a higher growth rate than other economic sectors. Furthermore, the supplementary growth sector; the consequences of the development of the primary growth sector resulting from very rapid economic growth. Primary growth sector with industrial expansion. Lastly, the derivative growth sector; growth that occurs in relation to growth in industrial production, national income, and a very rapid increase in population. For example, housing construction and food production related to the population. The growth of strategic sectors, able to contribute expansively to economic growth (Held et al., 2016; Mammadov, 2016; Pühringer, 2016; Vachon et al., 2016).

In addition, Rostow also underlined the importance of the movement towards maturity is the stage after society experienced a phase of massive industrialization. In this stage, there is also a comprehensive and widespread use of technology with an economy that is growing continuously although sometimes accompanied by a fluctuating rate. New industries are emerging quickly and old industries are lagging far behind, so they are able to produce their own goods in their own country rather than importing goods from abroad. The development of this industry is not only about consumer goods but also capital goods. People experience an increase in income due to high mass consumption at this time, so that there is continuous continuity. Massive public consumption is able to drive growth well. Where in the end, economic growth grows from the expenditure side (Cerny, 2014; Dean, 2014; Regilme, 2014; Schmidt and Thatcher, 2014; Wrenn, 2015; Yates and Bakker, 2014).

METHODS

This study uses quantitative research methods, to see the relationship between the independent variables (the contribution of the education sector, the tourism sector, the trade sector, and the industrial sector, each of which is measured in percent based on the GRDP in Makassar City) to the dependent variable (economic growth). This study uses secondary data sourced from the Central Statistics Agency in the city of Makassar in 2011-2020. The method of data collection, this research uses documentation techniques that collect various official publications of (BPS) and related agencies.

The collection technique in this study seeks to examine secondary data that has been obtained from related agencies, documentation by collecting various information related to this research in the form of research documents using literature, journals and books to obtain theories that can be used as references in managing and analyzing the data obtained. . This study uses multiple linear regression analysis techniques. To meet the standard of testing, it is necessary to test the classical assumptions including autocorrelation test, normality test, multicollinearity test, heteroxidity test and simultaneous test. The technique used is the exponential function equation with multiple regression as follows:

$$\text{Grwth}_t = \beta 0\ \text{Edc}_t{}^{\beta 1}\text{Trsm}_t{}^{\beta 2}\text{Indsry}_t{}^{\beta 3}\text{Trde}_t{}^{\beta 4}\ \mu t \dots\dots\dots\dots (1)$$

Furthermore, to measure the regression coefficient, a linear transformation is carried out based on the partial natural logarithm (Ln) into the model used, so that the following equation is obtained:

$$\text{LnGrwth}_t = \text{Ln}\beta 0 + \beta 1 \text{LnEdc}_t + \beta 2 \text{LnTrsm}_t + \beta 3 \text{LnIndsry}_t + \beta 4 \text{LnTrde}_t + \mu t \dots\dots\dots (2)$$

Where Y is economic growth measured in rupiah. (Edc) is the contribution of the education sector, (Trsm) is the contribution of the tourism sector, (Indsry) is the contribution of the industrial sector, (Trde) is the contribution of the trade sector, each of which is measured in rupiah. (βo) is the Intercept or constant number $\beta_1, \beta_2, \beta_3, \beta_4$ is the regression coefficient value, (Ln) is the Natural Logarithm, t is the Time Series/cross section; and (μ) is the standard error value.

RESULTS AND DISCUSSION

Makassar City is one of the many regions in Indonesia whose economy has been negatively affected by Covid-19. Long before the pandemic, Makassar City's economy grew persistently above the provincial and national levels, thus making its position for the South Sulawesi economy very strategic. The Central Statistics Agency of South Sulawesi noted that Makassar City's contribution to the provincial economy averaged 35 percent, while other regions were below 10 percent. In the midst of the pandemic, Makassar City's contribution to South Sulawesi has not changed, it is still consistently at 35.23 percent, confirming that the province's economy depends on one of them from the economic dynamics of Makassar City (BPS Makassar, 2020).

Figure
Economic Growth Makassar City and South Sulawesi 2016-2020 (%)
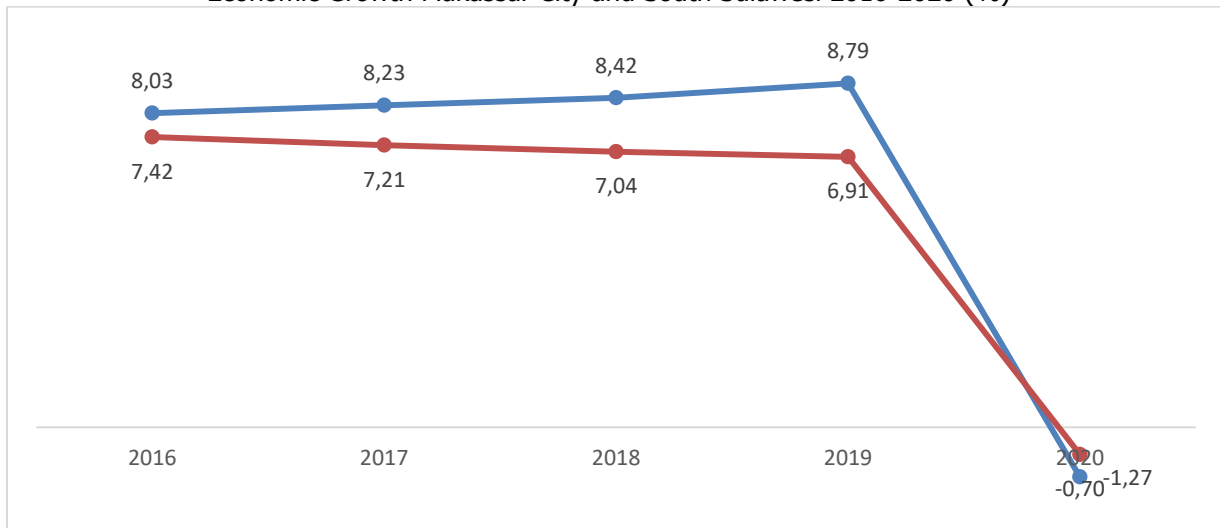
Sumber: BPS Makassar, 2020

Throughout 2016 to 2019, the added value of Makassar City's output still showed positive performance because it consistently recorded an increasing growth rate from 8.03 percent, then to 8.23 percent, 8.42 percent and finally reached 8.79 percent, the highest in six years. last year. However, when Covid-19 began to enter Indonesia in 2020 and eventually spread to all regions, the economy of Makassar City was hit very badly. This can be seen from the economic growth rate which contracted to -1.27 percent, the worst in the history of Makassar City (BPS Makassar, 2020).

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This condition affects South Sulawesi, especially considering the trend, the performance of South Sulawesi's economic growth before the pandemic has shown a tendency to slow down, in 2016 it reached 7.42 percent and was only able to grow 6.91 percent in 2019. Conditions in 2020 are getting worse because the economy of Sulawesi The South, which still had positive growth in quarters 1 and 2 thanks to the positive performance of the agricultural sector, finally recorded the worst annual growth rate since the 1998 economic crisis of -0.70 percent. The reason is that apart from agriculture whose growth has contracted, Makassar's negative economic growth has also exacerbated the situation (BPS South Sulawesi, 2020).

Figure
Economic Growth in South Sulawesi 2020 (%)
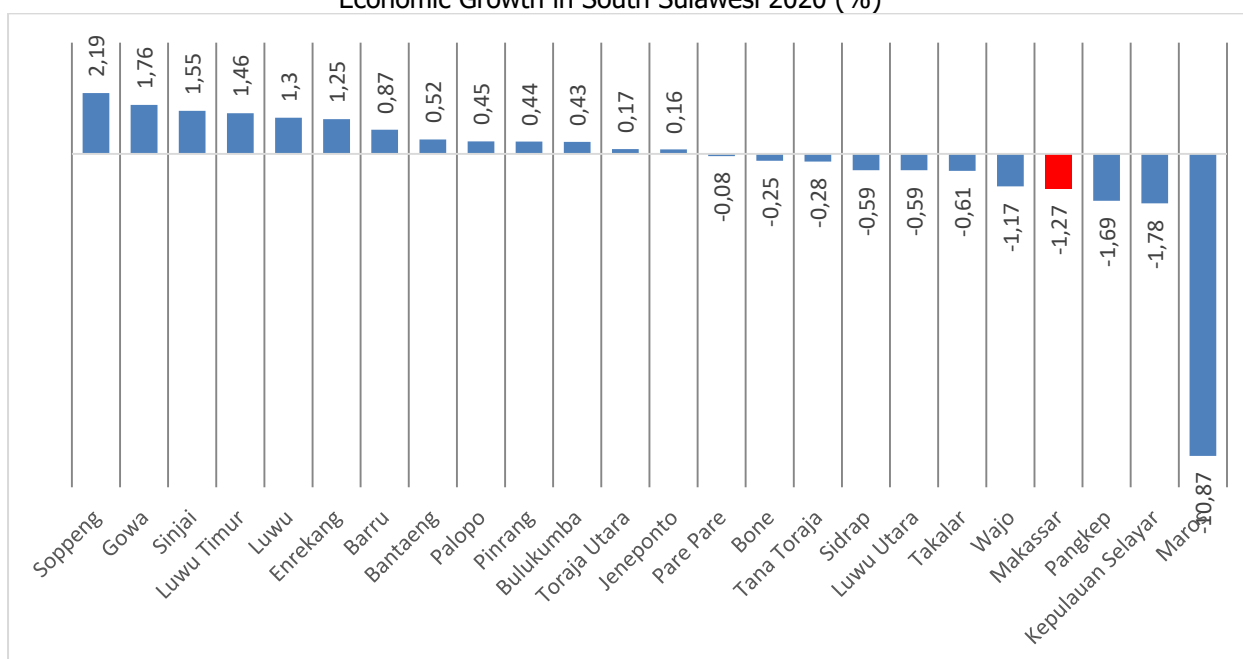
Sumber: BPS South Sulawesi, 2020

Besides Makassar City, there are 10 regions in South Sulawesi that experienced growth contraction in 2010 namely Pare-Pare City (-0.08%), Bone District (-0.25%), Tana Toraja District (-0.28%), Sidrap District (-0.59%), North Luwu District (-0.59%), Takalar District (-0.61%), Wajo District (-1.17%), Pangkep District (-1.69%) , Selayar Islands Regency (-1.78%), and Maros Regency (-10.87%), while those that are still growing positively but slowing down are 13 districts/cities. Of the 24 regions, Makassar City recorded the 5th worst growth performance after Maros, Selayar, and Pangkep Regencies. To analyze in more detail the causes of the sharp contraction of the Makassar City economy and its

dynamics during the pandemic, it is necessary to look at the performance of the expenditure side and the production side (BPS South Sulawesi, 2020).

The Makassar City government's decision to carry out Large-Scale Social Restrictions (PSBB) on April 24, 2020 became the initial momentum for the pandemic to undermine the economy of Makassar City. As the area with the highest number of active cases in South Sulawesi, the city government is required to adopt a PSBB policy as an effort to limit the movement of people so that the spread of the virus can be controlled. The first phase of the PSBB policy which lasted 14 days had a significant impact on the community's economy, especially in the production of goods and services. The pandemic has put Makassar City's economy at its lowest point which is called by (Caballero and Simsek, 2021) as the supply-demand doom loop, where the pandemic will not only affect the supply side but also the demand side.

The implementation of PSBB in Makassar is based on Perwali No. 22 of 2020 concerning the Implementation of PSBB which regulates the form of restricted activities, one of which is working in the workplace. It is still possible to do work at home, business actors apply work form home (WFH), but for types of work that require workers to come to the office, they are forced to temporarily stop their operational activities. The problem then is that the resilience of business actors to cover production activities is not the same, depending on the strength of their savings. If the pandemic cannot be controlled until July 2020, then layoffs cannot be avoided. But for companies with large capital stock trying to retain employees with a strategy of cutting salaries or laying off temporarily, even though the demand for products has decreased dramatically.

Although not all sectors were stopped/restricted their operational activities during the PSBB, the majority of business fields, including those in strategic sectors in the economic structure of Makassar City experienced sharp contractions such as the manufacturing industry, wholesale and retail trade, and construction. In total, the three of them contributed more than 30 percent to the GRDP of the Makassar City business field, so that the impact on the business field would directly affect economic growth.

In 2020, the productivity of the manufacturing sector experienced a contraction at the level of -4.22 percent, the worst performance in the manufacturing sector in history. Before the pandemic, the growth rate of the manufacturing industry did show a tendency to slow down. In 2016 the growth rate reached 7.85 percent with an ADHK GRDP value of Rp.

19.56 trillion, then dropped to 6.38 percent in 2017 which made the value of output rise to Rp. 20.81 trillion. In 2018, the growth rate had declined to 0.24 percent in 2018, where the added value only rose slightly to Rp. 20.86 trillion. The increase in productivity occurred in 2019 by 8.97 percent, but instead of increasing, in 2020 the pandemic caused a shock to the economy of Makassar City and the manufacturing industry became one of the sectors that experienced a deep enough growth depreciation so that the value of ADHK's GRDP fell to Rp. 21.77 trillion or a decrease of Rp. 0.96 trillion compared to 2019. Due to the slowing growth rate, the contribution of the manufacturing industry to the value of GRDP also decreased, which in 2016 reached 20.56 percent, down to 17.90 percent for 2020 (BPS Kota Makassar, 2020).

Tabel
Economic Growth Based on Business Field in Makassar City, 2016-2020 (%)

Business Field	2016	2017	2018	2019	2020
Agriculture, Forestry and Fisheries	3,64	1,58	-0,18	4,22	-3,25
Mining and excavation	-13,05	-8,99	-13,97	-12,56	-
Manufacturing industry	7,85	6,38	0,24	8,97	-4,22
Electricity and Gas Supply	10,59	6,42	9,68	9,15	-4,38
Water Supply, Waste Management, Waste and Recycling	2,11	6,87	6,23	-1,66	4,98
Construction	7,85	8,33	8,88	8,9	0,99
Wholesale and Retail Trade; Car and Motorcycle Repair	9,26	10,34	11,79	11,82	-5,43
Transportation and Warehousing	4,51	8,82	8,78	9,43	-17,34
Provision of Accommodation and Food and Drink	8,46	8,32	12,93	6,25	-19,83
Information and communication	10,06	9,81	12,88	8,6	10,53
Financial Services and Insurance	13,05	5,82	5,32	3,48	1,82
Real Estate	2,11	2,30	4,34	5,11	0,09
Company Services	6,04	8,36	10,17	12,41	-11,39
Government Administration, Land and Mandatory Social Security	-2,25	5,75	16,54	7,72	-0,43
Education Services	7,47	9,84	10,51	6,57	1,64
Health Services and Social Activities	9,60	9,88	10,84	9,48	12,02
Other services	9,36	9,42	13,58	10,6	-13,42

Sumber: BPS Makassar, 2020

All groups, including the government, have actually estimated that the processing industry is one of the business fields that will be negatively affected by the pandemic. However, the lack of local government policies (Makassar City and South Sulawesi Province) in restraining the rate of decline has also exacerbated the situation. During the pandemic, incentives for manufacturing industry business actors mostly come from the central government, for example, payment relief or electricity subsidies for industries affected by the Covid-19 pandemic, delays in paying 50 percent of PLN bills for six months, from April to

September 2020, tax reductions. , and various other incentives according to the type of industry. Incentives from the central government should be balanced with local government policies, but due to budget constraints due to refocusing and reallocation policies, local governments find it difficult to intervene, thus worsening the condition of the manufacturing industry (BPS Makassar, 2020).

Figure
Contribution Manufaturing Industry to GDRP 2016-2020 (%)
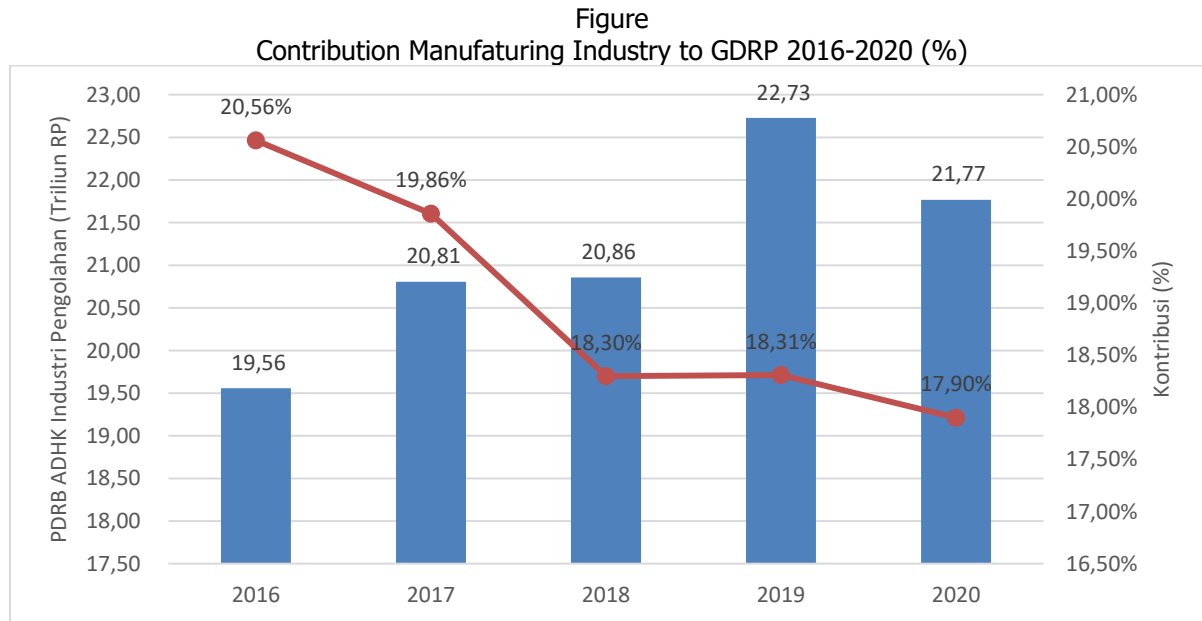
Sumber: BPS Makassar, 2020.

Similar to the manufacturing industry, the trade sector, which is the largest contributor to Makassar's economic structure, has also experienced a decline, in fact it tends to be even sharper at -5.43 percent in 2020. This condition is the worst performance of the trade sector in recent years considering its growth rate in recent years has reached two-digit number. In 2016, wholesale and retail trade recorded a growth rate of 9.26 percent and rose to 10.34 percent a year later. This positive performance continued in 2018 and 2019, where the productivity of the trade sector rebounded to 11.79 percent and 11.82 percent, respectively (BPS Makassar, 2020).

One of the causes of the growth of the trade sector is the increase in the demand for four-wheeled and two-wheeled motorized vehicles in Makassar City in line with the improvement in people's welfare. But the pandemic changed the fundamentals of the Makassar City economy and caused all business activities classified as wholesale and retail trade, especially the sales of motorized vehicles to drop drastically. The PSBB policy in Makassar City, accompanied by a high number of layoffs, puts great pressure on people's

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purchasing power, so that instead of buying new motorized vehicles, people must allocate spending for health and be on the lookout for the bad possibility of being contaminated with the virus.

Table 1. Multiple Linear Regression Test Results

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2004.886	.483		4154.778	.000
	Education	1.117	.000	1.314	2.576	.062
	Tourism	-2.904	.000	-1.042	-1.093	.336
	Industry	2.980	.000	.713	2.810	.048
	Trading	6.155	.000	.018	.059	.956

Source: Secondary data output after processing 2020; (Firmansyah, 2020).

This value indicates that if the constant is 2004,886, if the variables of the education sector (X1), tourism sector (X2), industrial sector (X3), and trade sector (X4) are constant or 0, then the value of economic growth is 2004,886. . The output of the linear regression coefficient for the contribution variable to the education sector reaches 1.117, so if the contribution of the education sector increases by 1%, it will increase economic growth by 1.117. For the tourism sector contribution variable, the output linear regression coefficient is -2,904, so if the contribution of this sector increases by 1%, it will decrease economic growth by -2,904. Judging from the contribution variable of the industrial sector which confirms the output of the linear regression coefficient of 2,980, then if the contribution of this sector increases by 1%, it will increase economic growth by 2,980. Finally, the contribution variable of the trade sector, with an output linear regression coefficient of 6.155, if this sector increases by 1%, it will increase economic growth by 6.155.

Table 2. Autocorrelation Test Results

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.999[a]	.999	.997	.140	2.609

a. Predictors: (Constant), Trading, Industry, Education, Tourism

b. Dependent Variable: Year

Source: Secondary data output after processing 2020; (Firmansyah, 2020).

Based on the results of the table above, it shows that the Durbin Watson (d) value of 2.609 is greater than the upper limit (dU) which is 2.1282 and less than (4-dU), so based on

the decision making in the Durbin Watson test, it can be concluded that there is no problem or problem. autocorrelation symptoms.

Graph 1. Normality Test Results
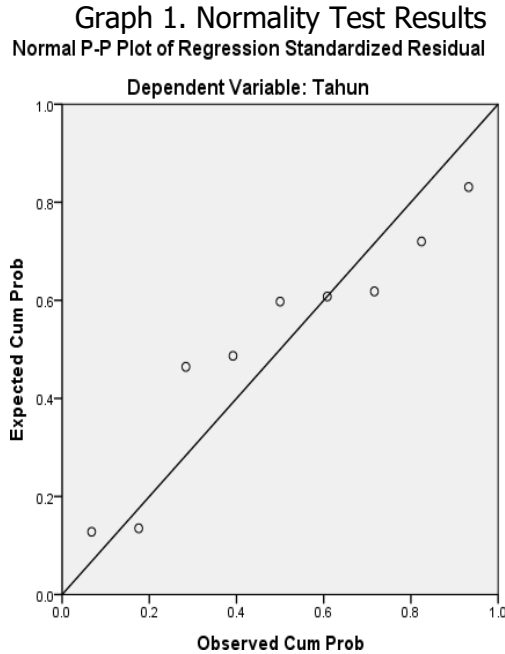
Source: Secondary data output after processing 2020; (Firmansyah, 2020).

From the results of the normality test using SPSS above, it can be seen that all variables have an Asymp.sig (2-tailed) value of 0.200 which is greater than 0.05, it can be concluded that the data is normally distributed. In the normal P.Plot image, it can be seen that the points follow and approach the line with its diagonal, so it can be concluded that the regression model meets the assumption of normality. Thus, the assumptions or requirements for normality in the regression model are met.

Tabel 3. Multicollinearity Test Results

Model		Collinearity Statistics	
		Tlerance	VIF
1	(Constant)		
	Education	.001	795.554
	Tourism	.000	2774.509
	Industry	.005	196.740
	Trading	.004	284.767
.Dependent Variable: Year			

Source: Secondary data output after processing 2020; (Firmansyah, 2020).

The VIF value for the Education variable is 795.554 > 10 and the tolerance value is 0.001 < 0.10 so that the Education variable is declared to have symptoms of

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Multicollinearity. The VIF value for the Tourism variable is 2774,509 > 10 and the tolerance value is 0.000 < 0.10 so that the Tourism variable is declared to have symptoms of Multicollinearity. The VIF value for the Industrial variable is 284.767 > 10 and the tolerance value is 0.004 < 0.10 so that the Industrial variable is declared to have symptoms of Multicollinearity. The VIF value for the Trade variable is 196,740 > 10 and the tolerance value is 0.005 < 0.10 so that the Trading variable is declared to have symptoms of Multicollinearity.

Table 4. Herooxidity Test Results
Coefficients[a]

Model		Sig.
1	(Constant)	.358
	Education (X1)	.510
	Tourism (X2)	.783
	Industry (X3)	.874
	Trading (X4)	.936

a. Dependent Variable: Abs_RES
Source: Secondary data output after processing 2020; (Firmansyah, 2020).

Based on the results of the heteroxidity test above, it is known that the significance value (sig) in the Education variable is 0.510, the Tourism variable is 0.783, the Industry variable is 0.874, and the Trade variable is 0.936, each variable having a value greater than 0.05. So that according to the basis of decision making in the Glejser test, it can be concluded that there are no symptoms of heteroxidity in the regression model.

Table 5. Results of Simultaneous Significance (Test F) Anova

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	59.921	4	14.980	762.987	.000[b]
	Residual	.079	4	.020		
	Total	60.000	8			

Source: Secondary data output after processing 2020; (Firmansyah, 2020).

Based on the results of the simultaneous test or F test above showing a sig value of 0.000 <0.05, it can be concluded that the hypothesis is accepted or in other words the influence of Education (X1), Tourism (X2), Industry (X3), and Trade (X4) on Economic Growth (Y), simultaneously has a significant effect on economic growth in Makassar City. Based on the comparison of the calculated F value with the F table, it can be seen from the calculated F value in table 4.11 of 762,987, while for the value of the F table it can use F table = (k; n-k) and the results obtained are 5.41. Thus the calculated F value is 762,987 > F table 5,41, it is concluded that H0 is rejected and H1 is accepted, which means that there

is a significant influence between income in the fields of education, tourism, industry on economic growth in Makassar City.

1. The contribution of the education sector on economic growth in Makassar City

The output of the linear regression coefficient for the contribution variable to the education sector reaches 1.117, so if the contribution of the education sector increases by 1%, it will increase economic growth by 1.117. The direction of the relationship between the contribution of the education sector and economic growth in Makassar City shows a unidirectional relationship, where an increase in the contribution of the education sector will result in an increase in economic growth in Makassar City. The contribution of the education sector has an important role, namely moving the service sector in Makassar City, as well as contributing to increasing the human capital of the community and increasing skilled labor in their respective fields as well as creating new knowledge, creating growth and sustainable development. The improvement in the education service sector has contributed to the economy of Makassar City. This is in line with the findings Kotásková et al., (2018) who found there was a positive correlation between the contribution of the education sector to the increase in economic growth. The increased contribution of the education sector will increase government revenues so as to increase economic growth. This confirms how big the role of the education sector is in driving the economic growth of a region. However, this is contrary to the findings Deskins et al., (2008) who found no correlation between the contribution of the education sector to economic growth. This is because the education sector takes a long time to create large revenues to drive growth.

2.The tourism sector's contribution to economic growth in Makassar City

The output of the linear regression coefficient shows a figure of -2,904, so if the contribution of this sector increases by 1%, it will decrease economic growth by -2,904. The direction of the relationship between tourism and economic growth in Makassar City is not unidirectional, where when there is an increase in the contribution to the tourism sector it does not result in an increase in economic growth in Makassar City. Sigurdardottir dan Candi (2019) found that the tourism industry, which is part of the creative economy, contributed positively enough to increase economic growth. One proof of the stretching of a tourism-based creative economy is that the income earned by a tourist destination depends on the longer tourists stay in an area. The income obtained comes from culinary and accommodation while living in the area. However, this finding is different from the results of

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the research conducted (Fahmi, 2019) where he observes that the tourism sector actually has a negative influence on economic growth. This is evidenced by the very low return of capital, when compared to the industrial sector. Where the industrial sector is able to attract such a large investment into an area, so that it is able to create faster economic growth than the tourism sector itself.

3. The industrial sector's contribution to economic growth in Makassar City

The contribution of the industrial sector that confirms the output of the linear regression coefficient is 2,980, so if the contribution of this sector increases by 1%, it will increase economic growth by 2,980. The direction of the relationship between the industrial sector and economic growth is unidirectional, where an increase in the contribution of the industrial sector will result in an increase in economic growth in Makassar City. The industrial sector has an important role in national economic development as can be seen from the contribution of each sub-sector to GDP or to the rate of national economic growth. This is in line with the results of research conducted Sun (2020) that the development carried out by the government in the industrial sector is able to create economic growth, reduce poverty and inequality. The development of the industrial sector, especially the manufacturing industry, is able to transform the economy for the better. The manufacturing industry which is side by side with industry 4.0 will be very fundamental in driving economic growth. This has also been found in many developed countries, which make the industrial sector the main sub-sector in driving economic growth. However, the findings are actually different from the findings Cammeraat (2020) who found a negative relationship between the contribution of the industrial sector to growth. The industrial sector actually creates false growth, which is not inclusive and creates new poverty and inequality. He underlined that growth driven by the industrial sector must be inclusive so as to create income distribution.

4. The trade sector's contribution to economic growth in Makassar City

The contribution of the trade sector to the output of the linear regression coefficient shows a figure of 6.155, if this sector increases by 1%, it will increase economic growth by 6.155. The direction of the relationship between the trade sector and economic growth is unidirectional, where an increase in the contribution of the trade sector will result in an increase in economic growth in Makassar City. Norrevik (2020) argues that the emergence of international trade or free trade requires intense production factors and the availability of abundant products. Making a product by determining how to combine different production factors so that it can increase economic growth in an area. The positive influence of trade on economic growth is higher if the value of exports also increases. The trade sector is the

most dynamic sector and is quite fast in capitalizing profits, increasing revenues and contributing to economic growth. Today's trade is not limited by space and time, coupled with the digitalization of the economy, actually accelerates trade transactions. The impact is that the exchange of goods and services is getting faster, production is increasing, investment is getting bigger so that economic growth is also increasingly accelerating. However, it was different from the findings Carrère et al., (2020) who found the negative impact of the trade sector on growth. Behind the stretching of the trade sector, there is an unbalanced trade, under the free trade rules of the WTO. Developing countries actually do not benefit from this process. On the other hand, developed countries tend to be more aggressive in capitalizing profits in the process.

CONCLUSION

The results of this study indicate that the contribution of the education sector has a direct positive and significant impact on economic growth in Makassar City. Likewise, the contribution of the industrial and trade sectors showed the same thing. This sector really contributes to the economic growth of Makassar City. However, in contrast to the tourism sector which actually shows the opposite effect. This sector has a negative but not significant effect on economic growth in Makassar City. Recommendations from these findings include, among others, that the government should seek to increase economic growth, by accelerating productive sectors, as the findings of this research, namely the education, trade and industry sectors, as a new source of economic growth for Makassar City. Weakening, the influence of the tourism sector, which was hit hard by the Covid-19 outbreak, can be a momentum for the government to re-encourage various kinds of tourism activities, which are more innovative and generate large revenues for the government, so that the growth of this sector can contribute greatly to future growth is still unpredictable in the midst of the Covid-19 pandemic. The limitation of this research is that there are still quite a number of important variables that are included as research instruments, in exploring new sources of economic growth.

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