Proceeding Book of ***The 6th ICMEM 2021****, 11-13 August 2021, Bandung, Indonesia*
ISBN*:978-623-92201-2-9*

Effects of Covid-19 Pandemic: Economic Growth and Inflation in North Maluku Province

Fahima Nasar, Ruliyanto Syahrain, Fajri Hatim, Muhammad Hasnin, Muhammad Kamal, Adi Muhtady, Johan Fahri, Muhammad Asril Arilaha, Fadli Ali Taslim and Irfandi Buamonabot*

Faculty of Economic and Business, Universitas Khairun, Ternate, Indonesia

Email: irfandi@unkhair.ac.id

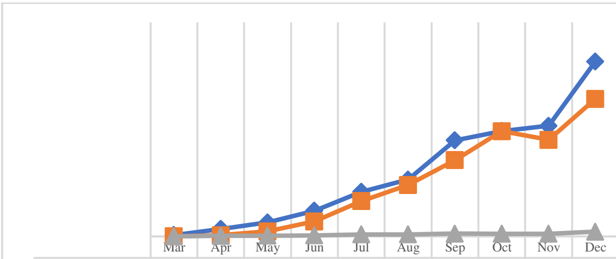
Abstract - **The purpose of this study was to determine what factors led to positive economic growth during the 2020 Covid-19 pandemic in North Maluku Province. The data used in this study came from the Central Statistics Agency (BPS) of North Maluku Province, namely data on economic growth in the first, second, and third quarters in North Maluku Province. The data in this study were processed and presented descriptively. The results of this study indicate that the economy of North Maluku in the first quarter of 2020 grew by 3.06 percent, the second quarter contracted by 0.16 percent and the third quarter experienced a growth of 6.66 percent. This study also provides the final conclusion that economic growth in North Maluku is experiencing the highest positive upward trend in Indonesia. In addition, the largest contribution to inflation in North Maluku is the Food, Beverage and Tobacco group, as well as the Personal Care and Services group.**

Keyword - ***Economic Growth, Inflation, Pandemic Covid-19, North Maluku Province***

I. INTRODUCTION

Coronavirus is a virus that attacks the human respiratorysystem.The virus is so easily spread that it causes the highest death rate in 2020[1].As a result of the pandemic covid-19 will impact the global economy[2], [3], [4], [5]. China is the second largest economy in the world, also experiencing an economic slowdown from the impact of Covid-19[6], with a growth rate of6.1% in 2019 to around 3.8% and in the worst circumstances can reach 0.1% and could even reach minus 2020. The mobilization of the population in the world that has a high connectivity causes the pandemic that occurs today continues to spread rapidly until the rest of the world is affected by this pandemic.Credible research institutes in the world have predicted the world economy is predicted to reach -1.1% JP Morgan,-2.2% by EIU, -1.9%,-2.2%by Fitch EIU, and -3% by IMF[7].These economic predictions are very worrying to the people of theworld[8].

Currently corona virus has spread to various countries, one of which is Indonesia, especially North Maluku Province. Corona virus has a very influential impact on the economy. Based on graphs 1 and 2, that the people who are positively indicated and healed increase every month both nationally and North Maluku. This shows that the pandemic covid-19 cannot be controlled, both by the central and local governments, so it needs policies that can increase economic growth [9].



	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Positive	1528	8590	16375	29912	51991	66420	112212	123080	129068	204315
Recover	81	1441	5786	17498	41101	60052	88988	122854	112717	160579
Death	146	656	821	1263	2255	2286	3323	3129	3076	5485

Source: Committee on Handling Covid19 and Economic Recovery, 2020

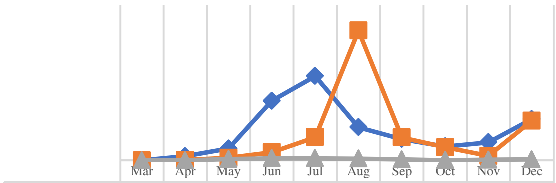
Fig. 1. Trend Covid 19 in Indonesia (Period March – December 2020)

Every policy thatappliestoit, what happens is that the community does not comply well because there is still a lack of awareness that the public has in dealing with this case, so this policy is considered less effective. Although the policy has been in effect since the beginning of March 2020, it turns out that there are still offices and even shopping centers that operate with crowds involved. In addition, people still do not have fear in doing activities outside the home. The enactment of this PSBB policy, then in a relatively long period of time offices and most industries are prohibited from operating for and the impact of such policies can cause economic losses and supply chains will be affected as well, including disruption of the production of goods and services [10]. This certainly has an impact on the decline of national economic growth, namely quartal economic growth I 2.97%, quartal 2 by -5.32% and quartal 3 by -3.49. But the decline in national economic growth did not have an impact on North Maluku Province[11]. Figure 3 shows that economic growth in quartal 3 was positive 6.66% from quartal I to quartal 2 (3.06% to -0.16%). Economic growth that shows a wide disparity, both nationally and in North Maluku[9].

Covid-19 has caused Indonesia's inflation trend and various countries to slow down and even lead to deflation. In this period, inflation figures recorded disruptions resulting from a surge in layoffs and changes in work schemes to WFH, hitting demand that impacted supply. The weakening of purchasing power is seen from the fall

ISBN*:978-623-92201-2-9*

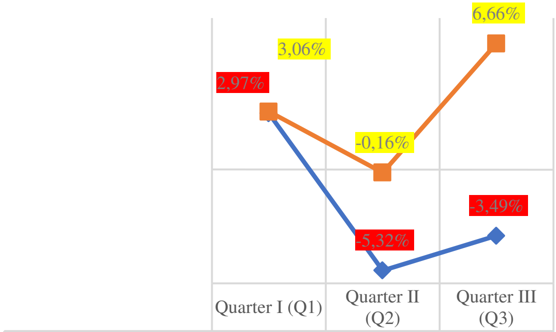
in core inflation. In July 2020 the figure was only 0.16% with a contribution of 0.11% [12].



	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Positive	1	39	113	574	813	320	205	134	174	398
Recover	0	3	24	78	223	1253	221	126	43	382
Death	0	0	11	20	20	16	8	1	6	8

Source: Committee on Handling Covid19 and Economic Recovery, 2020
Fig. 2. Trend Chart Covid 19 in North Maluku Province (Period March – December 2020)

Based on the explanation above it is clear that there is a wide disparity and at the same time becomes interesting to be studied. Based on this, the research submitted is the effect of pandemic covid19: the impact of inflation and economic growth in North Maluku Province in the first, second, and third quarters.



	Quarter I (Q1)	Quarter II (Q2)	Quarter III (Q3)
Indonesian Economic Growth	2,97%	-5,32%	-3,49%
North Maluku economic growth	3,06%	-0,16%	6,66%

Source: Central Bureau of Statistics, 2020.
Fig. 3. Economic Growth of Indonesia and North Maluku Province Quarter I, II and III 2020

II. LITERATUR REVIEW

A. Economic Growth

Economic growth is defined as a quantitative measure that describes the development of an economy in a given year when compared to the previous year [13]. Economic growth is defined as an increase in GDP or GNP regardless of whether the increase is greater or less than the population growth rate, and whether there is a change in the economic structure or an improvement in the institutional system or not [14]. Economic growth is a significant increase in national income (with an increase in per capita income) in a certain calculation period [15]. According to Mankiw and Ghent [16] GDP is often considered the best measure of economic performance. The purpose of GDP is to summarize economic activity in terms of a certain amount of money over a certain period of time. There are two approaches to looking at the size of GDP, the first to look at GDP as the total income of everyone in the economy. Another way of looking at GDP is as the total expenditure on the economy's output of goods and services.

B. Inflation

Inflation is a monetary phenomenon where there is a decrease in the value of the monetary unit of calculation for a commodity.On the other hand, if what happens is a decrease in the value of the monetary unit of calculation for goods/commodities and services, it is defined as deflation [17]. According to Ackley [18] inflation is the tendency of general prices to rise continuously.An increase in the price of just one or two goods is not called inflation, unless the increase extends to (resulting in an increase) a large proportion of the prices of other goods.An increase in the price of goods that occurs only in a period of time cannot be called inflation.

III. METHODOLOGY

This research was conducted in North Maluku Province. This research is descriptive quantitative research. Quantitative descriptive research is a study that seeks to describe a symptom, event and event that occurs at this time where researchers try to photograph events and events that become the center of attention to be described as they are. This research approach uses a quantitative approach because it uses numbers, ranging from data collection, interpretation of the data, as well as the appearance of the results. The samples in this study were only North Maluku Province. The reason for choosing only Ternate City is that the districts/cities within the scope of North Maluku Province are not representative enough for the measurement of inflation city.The types of data used in this study are secondary data related to inflation, economic growth and community data that have been confirmed positive, cured and died due to covid19, while the data used in this study are sourced from the Central Statistics Agency (BPS) of North Maluku Province and the Committee for Handling Covid19 and Economic Recovery. Collecting data in this study using the method of documentation.In this study, researchers used quarterly data on economic growth and inflation sourced from data from the Central Statistics Agency (BPS) of North Maluku Province and COVID-19 data sourced from the Committee for handling Covid-19 and Economic Recovery.

IV. FINDINGS AND DISCUSSION

North Maluku's economy in the first quarter of 2020 grew 3.06 percent (y-on-y), lower than the RPJMD target of between 7.6 and 8.1 percent. Inflation in the calendar year during the first quarter of 2020 was maintained at 0.86 percent of the RPJMD target of 2 to 3.5 percent. Exports in the first quarter have not met the target to increase from the previous year. Exports were recorded at 357 thousand tons or equivalent to US$130 million. While the poverty rate is still above 6 percent, while the target listed in the RKPD is below 6 percent.

The achievement of economic growth in the first quarter of 2020 north Maluku province slowed compared to economic growth in the first quarter of 2019 (y-on-y) of 7.65 percent. The slowdown was strongly influenced by growth from mining businesses which fell 6.22 percent (y-on-y) [19]. Some companies are expected to be in production, currently still in the construction phase of the construction of new smelters. Economic growth (y-on-y) contracted followed by inflation in the calendar year at 0.86 percent. The Existence of Pandemic Covid-19 indicated to affect people's incomes resulted in a decrease in people's purchasing power, thus lowering the level of demand from the public so that inflation is relatively low. Slowing economic growth is also followed by an increase in poverty rates and low contribution to the absorption of labor. Growth in the first quarter of 2020 supported by gross fixed capital formation has not been able to absorb labor that is closely related to capital-intensive investment. Investment, especially labor-intensive, is expected to have a positive impact on the provision of employment and reduce poverty [20].

TABLE 1 REGIONAL MACROECONOMIC DEVELOPMENTS OF NORTH MALUKU PROVINCE

Indicator	2020	
	RPJMD	**Achievements Q 1**
Economic Growth (% y-on-y)	7.6-8.1	3.06
Inflation (calendar year)	2-3.5	0.86
Export (thousand tons)	Increase	357
		US$130 Million
Unemployment	4.5	4.26
Poverty	<6.0	6.91

Source: BPS andBappeda North Maluku Province (2020)

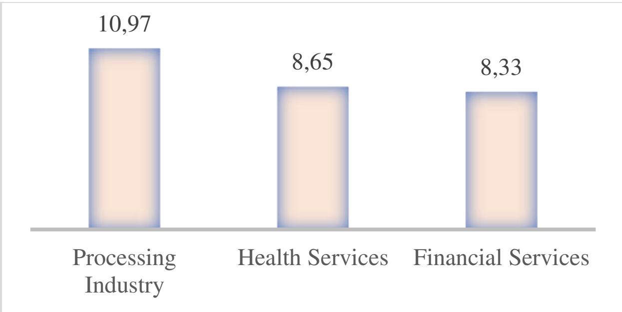
Therefore, the Local Government is expected to encourage investment in the labor-intensive sector and the establishment of inclusive development policies.For labor-intensive activities in the first quarter of 2020 in North Maluku Province, a number of works have been carried out, both funding from the central government and from each village through the APBDes[21][22][23]. Furthermore, for financial inclusion, the North Maluku Provincial Government has not done much.This is inseparable from the survey results that North Maluku Province is one of the provinces that has a low understanding of financial inclusion [24]. In addition, the North Maluku provincial government also tends to wait for the central government's direction regarding financial inclusion [25].

A. GDP and Economic Growth in Q1 2020

Gross Regional Domestic Product (GDP) of North Maluku Province on the basis of prevailing prices (ADHB) in the first quarter of 2020 reached Rp10,040 billion and on the basis of constant prices in 2010 (ADHK) reached Rp6,671.3 billion. North Maluku's economy grew 3.06 percent in the first quarter of 2019 (y-on-y) but slowed compared to 5.38 percent growth in the fourth quarter of 2019. The slowdown was strongly influenced by contraction in mining and quarrying businesses which fell 20.22 percent, Construction fell 7.01 percent, and the Government Administration recorded a decrease of 5.65 percent[19][26].

For the first quarter of 2020, economic growth decreased to around 3 percent. In terms of business field, y-on-y growth is supported by all business fields, highest in Processing Industry, Health Services and Social activities as well as financial intermediary services. The growth of the processing industry was supported by the production of previously built smelters. Other high growth in the Health Services sector and social activities are likely due to efforts to address the COVID-19 Pandemic [19].

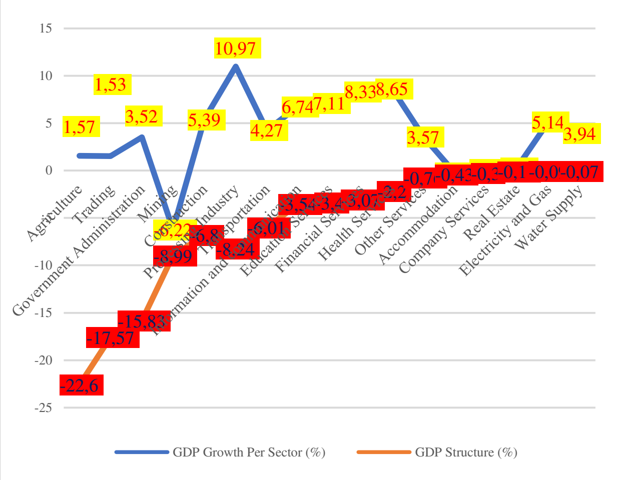
In terms of production, growth in the first quarter of 2020 (y-on-y) was driven by almost all business fields, with the highest growth achieved by the Processing Industry Business Field of 10.97 percent. This indicates that the processing industry became the highest source of economic growth in the first quarter of 2020 at 0.89 percent. Meanwhile, from the structure of GDP formation in the first quarter of 2020, gross fixed capital formation (PMTB) accounted for 67.06 percent [26][27].



Source: BPS North Maluku Province, 2020 (processed)
Fig. 4. Highest Growth by Business Quarter I-2020 (y-on-y)

Meanwhile, the Agricultural sector is still the sector that contributes the highest contribution to the north Maluku GDP structure of 22.06 percent. Regional economic fundamentals will be stronger if the source of growth is supported by business fields that contribute highly to the formation of GDP[26][19].

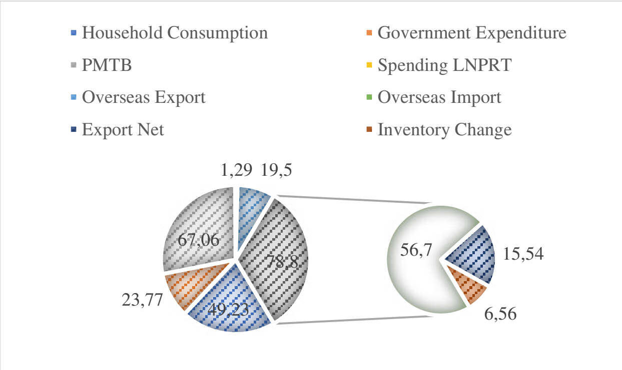
ISBN*:978-623-92201-2-9*



Source: BPS North Maluku, 2020 (processed)

Fig. 5. Structure and Growth of GDP in Q1 2020 North Maluku by Business Field

The highest source of growth (y-o-y) occurred in the Gross Fixed Capital Formation (PMTB) indicating a considerable capital expenditure in North Maluku. Based on the structure of the formation of GDP, Household Consumption is still the main support of north Maluku GDP. In the structure of GDP, net exports of North Maluku region that are still of negative value contribute to the source of growth. The low net exports between regions show that the economy of North Maluku relies heavily on the supply of products and services from outside the region[26].



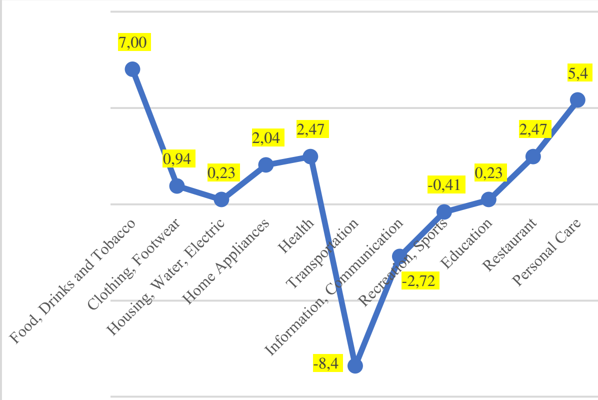
Source: BPS North Maluku Province, 2020 (processed)

Fig. 6. Sources of GDP Growth by Expenditure Type

B. Inflation in Q1 2020

Until the first quarter of 2020, North Maluku Province represented by ternate city experienced inflation of 2.09 percent (y-on-y) or below national inflation of 2.96 percent (y-on-y). Meanwhile, inflation in the calendar year up to the first quarter of 2020 was 0.86 percent. Monthly inflation during the first quarter of 2020 was the highest in February 2020 at 1.34 percent[26].

Based on the spending group, inflation in the calendar year to the first quarter of 2020 occurred in almost all spending groups[19]. The largest contributor to inflation occurred in the Food, Beverage and Tobacco group which recorded inflation of 7.60 percent[28]. Other groups that contributed to inflation during the first quarter of 2020 were Household Supplies, Health, Restaurants[27]. Dependence on supply from outside the region also led to high inflation in the group. Another factor is the covid-19 pandemic which is indicated to affect inflation in groups such as health, food providers (restaurants)[20].



Source: BPS North Maluku Province, 2020

Fig. 7. Inflation (y-on-y) and Inflation for calendar year per group

Inflation figures are relatively controlled, but dependence on goods and services from outside the region, which is indicated by low net exports between regions, should be a concern. Local governments and the Regional Inflation Control Team should take measures to anticipate regional inflation control. One of them is through stimulus to businesses that produce food products such as agricultural commodities and horticulture that have been supplied from other regions[29].

C. Regional Economic Growth and Analysis Quarter II 2020

The spread of Covid-19 hit global economic growth which many international institutions predict will experience a deep contraction[30]. The Covid-19 pandemic has weakened the economic sector on all fronts. This weakening occurs both on a global level and on a regional scale[31]. The Organization for Economic Cooperation and Development (OECD) estimates that by 2020 Indonesia's economy will contract by 3.90 percent if hit by the second wave of Covid-19.

The government has issued several policies and stimulus, including budgeting Rp695.20 trillion for the handling of Covid-19 in Indonesia, ranging from national economic recovery (PEN) programs, exit strategies or gradual economic opening to the new normal order, to reset economic transformation to encourage economic acceleration[32][33]. Some of these policies, especially since the enactment of the new normal, also have an effect when viewed from early indicators some sectors of the economy are starting to crawl up[34]. However, it does not mean that the government and the people of Indonesia can be calm because it will still be haunted by pandemics, recessions, and the threat of the second wave of Covid-19[35].

Due to the Covid-19 pandemic announced at the end of the first quarter of 2020, north Maluku's economic growth in the second quarter of 2020 contracted by 0.16 percent (y-o-y) in line with national growth which contracted deeper to reach 5.32 percent (y-o-y)[12].

D. Gross Regional Domestic Product (GDP) Quarter II 2020

Gross Regional Domestic Product (GDP) is the market value of all goods and services produced in a region or region within a certain period of time[12][36][37]. While the rate of economic growth is the process of changing economic conditions by calculating the change in the value of GDP on the basis of constant prices (ADHK) from the previous year[12][38][39]. PDRB of North Maluku Province on The Basis of Prevailing Price (ADHB) in the second quarter of 2020 reached Rp9,872.45 billion and GDP on the Basis of Constant Price 2010 (ADHK) reached Rp6,581.36 billion[34].

GDP in the second quarter of 2020 grew by minus 0.16 percent (y-o-y), contraction compared to growth in the second quarter of 2019. Compared to the first quarter of 2020, q-to-q growth contracted by 1.35 percent[34]. The occurrence of economic contraction is the result of restrictions on social activities due to the Covid-19 Pandemic that affects the decline in economic activity[40].

GDP can be seen from the production side approach and the expenditure side approach[41][42][12]. The production side approach looks at the added value of goods and services produced from various production units in a particular region and period. In terms of production or business field, generally the growth of business fields is contracting. Nevertheless, there are 8 categories of business fields that recorded positive growth in the second quarter of 2020[34].

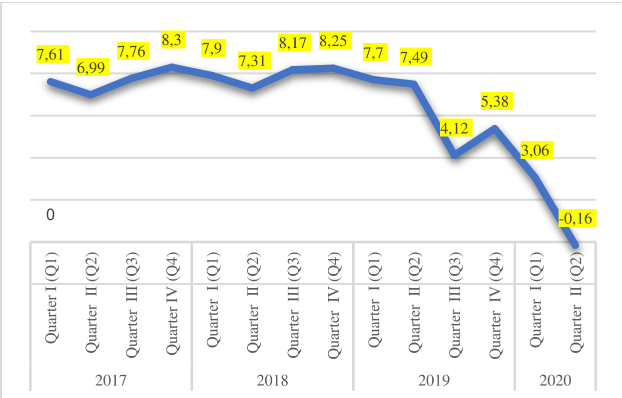
Some business sectors that recorded positive growth include the processing industry sector of 4.30 percent because it still operates normally[34]. The information and communications sector grew by 0.27 percent due to the impact of work and schooling from home. health care sector & social activities grew by 0.21 percent due to increased activities in the health and social sector during the Covid-19 response[43].

Meanwhile, the sector with negative GDP growth rate is transportation and warehousing sector by minus 1.64 percent due to the start of travel restrictions, as well as the large trade &retail sector, car &motorcycle repairs by minus 1.56 percent due to reduced public consumption impact of restrictions on activities[43][34].

The Agricultural Sector is still the sector that contributes the highest contribution to the north Maluku GDP structure of 22.16 percent[43]. With positive growth, the agricultural, forestry, fisheries sectors become sectors that need to be favored to support regional economic fundamentals and the establishment of north Maluku GDP[34]. Other sectors that contributed the highest to the North Maluku GDP were the large trade and retail sectors with a contribution value of 16.61 percent[43][34]. Social activities that reopened since the end of the second quarter of 2020 are expected to increase the growth of this sector[12].

The approach in terms of expenditure can describe the formation of GDP due to the fulfillment of the demand needs of a region[42]. GDP in terms of expenditure in North Maluku in the second quarter of 2020 showed almost all expenditures contracted except gross fixed capital formation (PMTB) and foreign exports[12]. PMTB recorded growth of 82.95 percent (y-o-y) which among others was influenced by development activities in the Halmahera industrial estate located in Central Halmahera by PT. IWIP is intended to facilitate the processing of minerals and the production of battery components of electric vehicles[43].

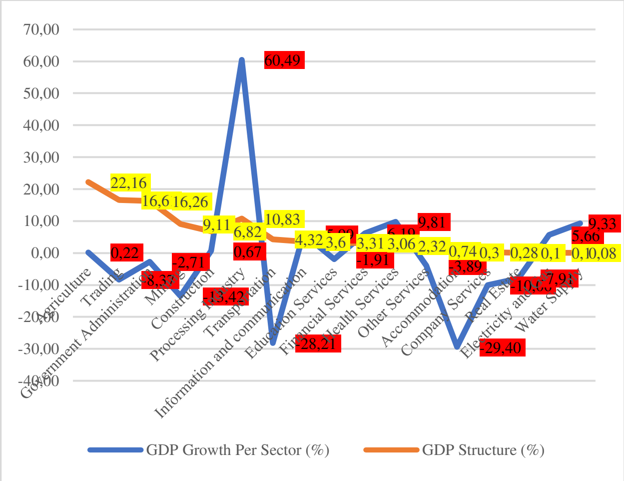
Gross Fixed Capital Formation (PMTB) contributed to growth of 25.78 percent, indicating considerable capital expenditure/investment activity in North Maluku [43]. Furthermore, Foreign Exports also recorded growth of 25.37 percent (y-o-y) [34]. The growth in the export expenditure group is a result of the production of processing industry that continues to run during the Covid-19 pandemic, for example the metal, iron ore and nutmeg processing industries [12].



Source: BPS and BPS North Maluku Province, 2020 (processed)
Fig. 8. GDP Growth and Growth
Quarterly Economy (y-on-y) 2017-2020

Based on the structure of the formation of GDP, Household Consumption is still the main support of north Maluku GDP[34]. In the structure of GDP, net exports of Norths Maluku region that are still of negative value also affect the pace of economic growth[43]. The low net exports between regions show that the economy of North Maluku relies heavily on the supply of products and services from outside the region[12].

ISBN*:978-623-92201-2-9*

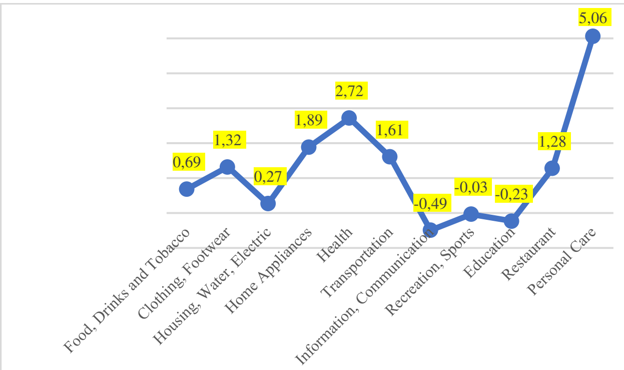


Source: BPS North Maluku Province, 2020 (processed)
Fig. 9. Structure and Growth of GDP in Q2/2020 North Maluku by Business Field

E. Inflation In Q2 2020

Until the end of the second quarter of 2020, North Maluku Province represented by the city of Ternate experienced inflation of 1.08 percent (y-on-y) or below national inflation of 1.96 percent (y-on-y). Meanwhile, inflation in the calendar year up to the second quarter of 2020 was 1.53 percent. Monthly inflation during the second quarter of 2020 was the highest in May 2020 at 0.89 percent due to religious holidays.

Based on the expenditure group, inflation in the calendar year up to the second quarter of 2020 occurred in almost all spending groups. The largest contributor to inflation occurred in the Food, Beverage and Tobacco group which recorded inflation of 3.17 percent. Other groups that contributed to inflation during the second quarter of 2020 were Clothing and Footwear, Health, and Personal Care and Other Services.



Source: BPS North Maluku Province, 2020 (processed)
Fig.10. Inflation (y-on-y) and Inflation Calendar Year per Group

Dependence on supply from outside the region also led to high inflation in the group. Another factor is the Covid-19 Pandemic which is indicated to affect inflation in groups such as health, food providers (restaurants)[44][20]. Although the inflation rate is relatively controlled, but dependence on goods and services from outside the region indicated low net exports between regions, should be a concern[45].

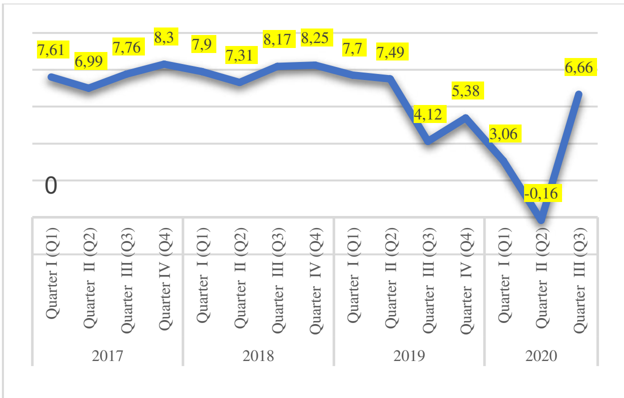
F. Regional Economic Development and Analysis

The spread of COVID-19 hit global economic growth which many international institutions predict will experience a deep contraction[30]. Pandemic Covid-19 makes the economic sector weaken on all fronts[31]. This weakening occurs both on a global level and on a regional scale.

The government has issued several policies and stimulus, including budgeting Rp695.20 trillion for the handling of COVID-19 in Indonesia, ranging from the National Economic Recovery (PEN) program, exit strategy or gradual economic opening to the new normal order, to reset economic transformation to encourage economic acceleration. Some of these policies, especially since the enactment of the new normal, also have an effect when viewed from indicators in some sectors of the economy that began to crawl up[46]. However, it does not mean that the government and the people of Indonesia can be calm because it will still be haunted by pandemic,recession, until the threat of the second wave of COVID-19. Pandemic COVID-19 has impacted the contraction of national economic growth in the third quarter of 2020 reached 3.49 percent (y-o-y)[9][12].

G. GDP and Economic Growth Quarter III 2020

GDP of North Maluku Province on the Basis of Prevailing Prices (ADHB) in the third quarter of 2020 reached Rp.10,678.14 billion and GDP on the basis of Constant Prices 2010 (ADHK) reached Rp.7,095.91 billion[47]. GDP growth rate in Q3-2020 grew by 6.66 percent (y-o-y), increasing compared to growth in the same period[48]. In q-to-q, north Maluku's economy grew by 7.82 percent, a result of the rise in economic activity driven by the growth of most businesses[12].



Source: BPS National, 2020 (processed)
Fig. 11. GDP Growth and Quarterly Economic Growth (y-on-y) 2017-2020

GDP can be seen from the production side approach and the spending side[41][42][12]. The production side approach sees the added value of goods and services produced from various production units in a region in a certain period. In terms of production or business field, in

ISBN*:978-623-92201-2-9*

general recorded positive growth in the third quarter of 2020[34].

Meanwhile, some business sectors that recorded contraction include the large trade and retail sectors, car &motorcycle repairs that slowed by 1.11 percent due to decreased public consumption[47]. The transportation and warehousing sector contracted by 0.74 percent due to social distancing in the use of public transportation during the COVID-19 pandemic period[48].

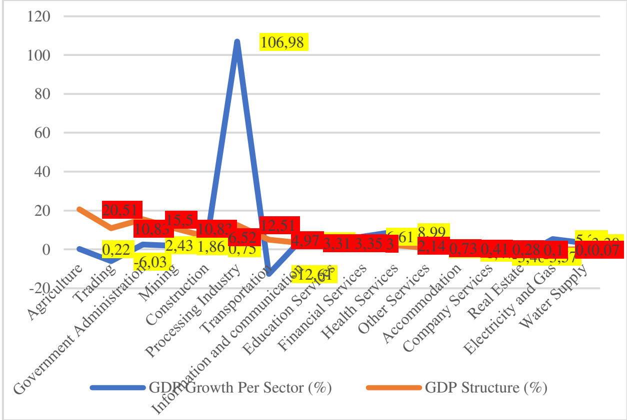
The Agricultural Sector is still the sector that contributes the highest contribution to the north Maluku GDP structure of 20.51 percent[48]. With positive growth, the agricultural, forestry, fisheries sectors become sectors that need to be favored to support regional economic fundamentals and the establishment of north Maluku GDP[49]. Other sectors that contributed the highest to the North Maluku GDP were the large trade and retail sectors with a contribution value of 15.68 percent[12][48][49].

Meanwhile, the processing industry sector contributed 12.51 percent to the North Maluku GDP. The processing industry sector in Q3-2020 achieved the highest growth of 7.15 percent. The increase in sector growth is possible due to social activities that have been re-opened since the end of Q2-2020 so that the company has started operations[48][49].

The approach in terms of expenditure can describe the formation of GDP due to the fulfillment of the demand needs of a region[48]. GDP in terms of expenditure in North Maluku in the third quarter of 2020 showed almost all expenditures experienced growth except Consumption Expenditure of Non-Profit Institutions serving Households (LNPRT). LNPRT consumption contracted by 7.44 per cent (y-o-y)[49].

Meanwhile, overseas exports grew by 88.51 percent, triggered by the operation of the processing industry that produces export products in the form of iron and steel, ore, crust and metal ash [48]. Overseas imports that achieved growth of 45.48 percent showed that the processing industry is already operating by importing raw materials to be processed into export commodities [49].

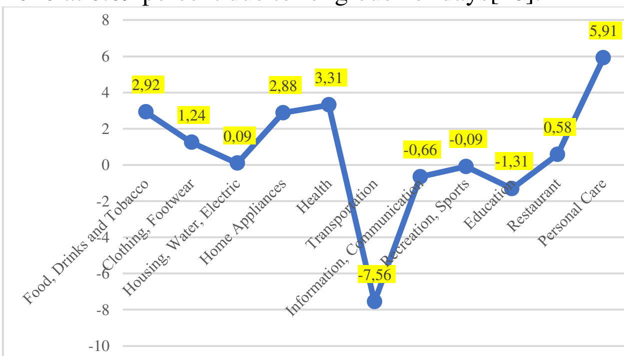
Gross Fixed Capital Formation (PMTB) contributed to growth of 9.71 percent, indicating considerable capital expenditure/investment activity in North Maluku [48]. Based on the structure of the formation of GDP, Household Consumption is still one of the main supporters of north Maluku GDP along with PMTB [49]. Net exports of North Maluku region that are still of negative value indicate that goods from outside that enter North Maluku are greater than goods shipped out of the area around North Maluku. This shows that the economy of North Maluku relies heavily on the supply of products and services from outside the region [12].



Source: BPS North Maluku Province, 2020 (processed)
Fig. 12. Structure and Growth of GDP Quarter III 2020 North Maluku by Business Field

H. North Maluku Inflation Quarter III 2020

Until the end of Q3/2020, North Maluku Province experienced inflation of 0.76 percent (y-on-y) or below national inflation of 1.42 percent (y-on-y)[49]. Meanwhile, inflation in the calendar year up to the second quarter of 2020 was 1.53 percent. Monthly inflation during the second quarter of 2020 was the highest in May 2020 at 0.89 percent due to religious holidays[48].



Source: BPS North Maluku Province, 2020
Fig. 13. Inflation (y-on-y) and Inflation Calendar Year per Group

Based on the spending group, inflation in the calendar year up to Q3/2020 occurred in almost all spending groups[48]. The largest contributor to inflation was the Personal Care and Other Services group, which recorded inflation of 4.40 percent. Another group contributing to inflation is Health and Food, Beverages and Tobacco. Other groups that contributed to inflation during the second quarter of 2020 were Clothing and Footwear, Health, and Personal Care and Other Services[49].

Dependence on supply from outside the region also led to high inflation in the group[20]. Another factor is the presence of pandemic COVID-19 which is indicated to affect inflation in groups such as health, food providers (restaurants)[44][45].

V. CONCLUSION

Based on the results of the research that has been discussed, the first conclusion can be drawn, theeconomy of North Maluku in the first quarter of 2020 grew 3.06 percent (y-on-y) or lower when compared to the RKPD target of 7.6-8.1 percent and decreased when compared to the growth in the first quarter of 2019 of 7.65 percent.Second, inflation in the calendar year to the first quarter of 2020 is recorded 0.86 percent, above the national calendar year inflation of 0.76 percent. Food, beverage and tobacco groups became the largest contributors to inflation during the first quarter of 2020.Third, the economy of North Maluku in the second quarter of 2020 contracted by 0.16 percent (y-on-y). Meanwhile, compared to the first quarter of 2020, q-to-q growth contracted by 1.35 percent.Fourth, inflation in the Calendar Year of June 2020 (June 2020 to December 2019) of North Maluku Province is 1.53 percent and greater than the national inflation rate for the June 2020 calendar year of 1.09 percent.Fifth, the Economy of North Maluku in the third quarter of 2020 experienced growth of 6.66 percent (y-o-y).lastly, inflation in the September 2020 calendar year (September 2020 to December 2019) of North Maluku Province was 0.35 percent and less than the national inflation rate for the September 2020 calendar year of 0.89 percent.

The recommendations for the local government of North Maluku are first, although inflation figures are relatively controlled but dependence on goods and services from outside the region indicated low net exports between regions, should be a concern. Second, local governments and the regional inflation control team should take measures to anticipate regional inflation control. One of them is through stimulus to businesses that produce food products such as agricultural commodities and horticulture that have been supplied from other regions.

REFERENCES

[1] WHO, "COVID-2019 Situation Reports," 2020. https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports/.

[2] N. Fernandes, "Economic effects of coronavirus outbreak (COVID-19) on the world economy," *SSRN 3557504*, pp. 0–29, 2020.

[3] W. J. McKibbin and R. Fernando, "The Global Macroeconomic Impacts of COVID-19: Seven Scenarios," *Asian Econ. Pap.*, vol. 20, no. 2, pp. 1–30, 2020, doi: https://doi.org/10.1162/asep_a_00796.

[4] D. Altig *et al.*, "Economic uncertainty before and during the COVID-19 pandemic.," *J. Public Econ.*, vol. 191, pp. 1–13, 2020, doi: https://doi.org/10.1016/j.jpubeco.2020.104274.

[5] P. Ozili, "COVID-19 in Africa: socio-economic impact, policy response and opportunities," *Int. J. Sociol. Soc. Policy*, 2020, doi: 10.1108/IJSSP-05-2020-0171.

[6] G. N. Alhassan, F. F. Adedoyin, F. V. Bekun, and T. J. Agabo, "Does life expectancy, death rate and public health expenditure matter in sustaining economic growth under COVID-19: Empirical evidence from Nigeria?," *J. Public Aff.*, pp. 1–11, 2020, doi: 10.1002/pa.2302.

[7] R. Baldwin and B. W. Di Mauro, *Economics in the time of COVID-19: A new eBook.* VOX CEPR Policy Portal, 2020.

[8] A. Iskandar, B. T. Possumah, and K. Aqbar, "Peran Ekonomi dan Keuangan Sosial Islam saat Pandemi Covid-19," *SALAM J. Sos. dan Budaya Syar-i*, vol. 7, no. 7, pp. 625–638, 2020, doi: 10.15408/sjsbs.v7i7.15544.

[9] 2020, "Komite penanganan Covid19 dan Pemulihan Ekonomi." https://covid19.go.id/pemulihan-ekonomi.

[10] F. R. Yamali and R. N. Putri, "Dampak Covid-19 Terhadap Ekonomi Indonesia," *Ekon. J. Econ. Bus.*, vol. 4, no. 2, p. 384, 2020, doi: 10.33087/ekonomis.v4i2.179.

[11] D. Yuniarti, D. Rosadi, and Abdurakhman, "Inflation of Indonesia during the COVID-19 pandemic," *J. Phys. Conf. Ser.*, vol. 1821, pp. 1–10, 2021, doi: 10.1088/1742-6596/1821/1/012039.

[12] Badan Pusat Statistik, "laporan Perekonomian Indonesia," 2020. https://www.bps.go.id/publication/2020/09/16/be7568ad496829f35cea4b27/laporan-perekonomian-indonesia-2020.html.

[13] S. Sukirno, *Makroekonomi Teori Pengantar*, 3rd ed. Jakarta: Raja Grafindo, 2004.

[14] T. T. Tambunan, *Perekonomian Indonesia (Teori dan Temuan Empiris)*. Jakarta: Ghalia Indonesia, 2001.

[15] I. Putong, *Pengantar Ilmu Mikro & Makro. Ghalia Indonesia, Jakarta. cetakan pertama.*, 1st ed. Jakarta: Ghalia Persada, 2011.

[16] N. G. Mankiw and L. Ghent, *Instructor's Manual with Solutions Manual Principles of Macroeconomics*, 4th ed. Thomson South-Western, 2007.

[17] Boediono, *Ekonomi Makro: Seri Sinopsis Pengantar Ilmu Ekonomi No. 2,*. Yogyakarta: BPFE, 1999.

[18] G. Ackley, "The costs of inflation," *Am. Econ. Rev.*, vol. 68, no. 2, pp. 149–154, 1978, doi: 10.2307/1816680.

[19] Kemenkeu, *Kajian Fiskal Regional Triwulan I 2020*. 2020.

[20] N. Hasan and M. Sun'an, "The Effect of Private Inflation and Investment on Unemployment and Poverty in North Maluku Province," *J. Int. Conf. Proc.*, vol. 3, no. 3, pp. 36–48, 2020, doi: 10.32535/jicp.v2i5.928.

[21] Bisnis.com, "Program Padat Karya Tunai Irigasi Tahun 2020 Jangkau 6.000 Lokasi," *ekonomi.bisnis.com*, 2020. https://ekonomi.bisnis.com/read/20200327/45/1218762/padat-karya-irigasi-kementerian-pupr-tebar-proyek-di-6.000-lokasi (accessed Jul. 29, 2021).

[22] B. Maluku Utara, "Penandatanganan Perjanjian Kerjasama PPK Pengembangan PLP dengan KSM Program Sanitasi Pedesaan Padat Karya Kabupaten Halmahera Selatan," *BPPW Maluku Utara*, 2020. http://ciptakarya.pu.go.id/balai/maluku-utara/berita/detail/PPLP/11046/-.

[23] S. Safrudin, "Manfaatkan DD, Desa Tuada Fokus Sektor Produktif dan Padat Karya," *Malottoday*, 2020. https://maluttoday.com/2020/02/19/manfaatkan-dd-desa-tuada-fokus-sektor-produktif-dan-padat-karya/.

[24] OJK, "Survei Nasional Literasi dan Inklusi Keuangan 2019," *Otoritas Jasa keuangan*, 2020. https://www.ojk.go.id/id/berita-dan-kegiatan/publikasi/Pages/Survei-Nasional-Literasi-dan-Inklusi-Keuangan-2019.aspx.

[25] Beritamalut.co, "Sekda Malut Hadiri Sosialisasi Program Inklusi Keuangan Sekaligus Pemberian KUR," *Beritamalut.co*, 2020. http://beritamalut.co/2020/12/11/sekda-malut-hadiri-sosialisasi-program-inklusi-keuangan-sekaligus-pemberian-kur/.

[26] M. U. BPS, "Pertumbuhan Ekonomi Maluku Utara Triwulan I-2020," 2020. [Online]. Available: https://malut.bps.go.id/pressrelease/2020/05/06/469/ekonomi-maluku-utara-triwulan-i-2020-tumbuh-3-06-persen--y-on-y---ekonomi-maluku-utara-triwulan-i-2020-turun-2-87-persen--q-to-q-.html.

[27] A. I. Fahrika and J. Roy, "Dampak pandemi covid 19 terhadap perkembangan makro ekonomi di indonesia dan respon kebijakan yang ditempuh," *Inov. J. Ekon. Keuang. dan Manaj.*, vol. 16, no. 2, pp. 206–213, 2020, doi: http://dx.doi.org/10.29264/jinv.v16i2.8255.

[28] D. Yuniarti, D. Rosadi, and Abdurakhman, "Inflation of Indonesia during the COVID-19 pandemic," in *Journal of Physics: Conference Series*, 2021, vol. 1821, no. 1, pp. 1–10, doi: 10.1088/1742-6596/1821/1/012039.

[29] F. Velde, "What Happened to the US Economy During the 1918 Influenza Pandemic? A View Through High-Frequency Data," 2020, doi: https://doi.org/10.21033/wp-2020-11.

[30] O. A. O'Neill, L. J. Stanley, and C. A. O'Reilly, "Disaffected Pollyannas: The influence of positive affect on salary expectations, turnover, and long-term satisfaction," *J. Occup. Organ. Psychol.*, vol. 84, no. 3, pp. 599–617, 2011, doi:

10.1348/096317910X500801.

[31] L. Song and Y. Zhou, "The COVID-19 Pandemic and Its Impact on the Global Economy: What Does It Take to Turn Crisis into Opportunity?," 2020. doi: 10.1111/cwe.12349.

[32] Cnbcindonesia, "Airlangga: Program Padat Karya Jurus RI Pulihkan Ekonomi," *cnbcindonesia*, 2020. https://www.cnbcindonesia.com/news/20200624123726-4-167643/airlangga-program-padat-karya-jurus-ri-pulihkan-ekonomi.

[33] Kemenkeu, "Melalui Program Pemulihan Ekonomi Nasional (PEN), Mari Bersama-sama Menggerakkan Roda Perekonomian Untuk Indonesia Lebih Baik," *Kemenkeu*, 2020. https://www.djkn.kemenkeu.go.id/kanwil-sumseljambibabel/baca-artikel/13298/Melalui-Program-Pemulihan-Ekonomi-Nasional-PEN-Mari-Bersama-sama-Menggerakkan-Roda-Perekonomian-Untuk-Indonesia-Lebih-Baik.html.

[34] Kemenkeu, *Kajian Fiskal Regional Triwulan II 2020*. 2020.

[35] Detik.com, "Seberapa Kuat Ekonomi RI Jika Hadapi Gelombang Kedua Corona?," *Detik.com*, 2020. https://news.detik.com/adv-nhl-detikcom/d-5074170/seberapa-kuat-ekonomi-ri-jika-hadapi-gelombang-kedua-corona.

[36] N. Oktaviana and N. Amalia, "Gross Regional Domestic Product Forecasts Using Trend Analysis: Case Study of Bangka Belitung Province," *J. Ekon. Stud. Pembang.*, vol. 19, no. 2, 2018, doi: 10.18196/jesp.19.2.5005.

[37] V. Q. Viet, "Gross regional product (GRP): an introduction Gross regional product (GRP): an introduction," in *International Workshop Regional Products and Income Accounts*, 2010, no. March, pp. 15–17.

[38] D. Acemoglu, "Introduction to economic growth," *J. Econ. Theory*, vol. 147, no. 2, pp. 545–550, 2012, doi: 10.1016/j.jet.2012.01.023.

[39] N. Kaldor, "A Model of Economic Growth," *Econ. J.*, vol. 67, no. 268, pp. 591–624, 1957, doi: https://doi.org/10.2307/2227704.

[40] S. Soemartini, "Stimulus Perekonomian Di Tengah Krisis Ekonomi Lokal Dan Global Akibat Merebaknya Covid 19," *J. Biastatistics*, no. Edisi Khusus Seminar Nasional Online (SNO) Tahun 2020, pp. 35–54, 2020, [Online]. Available: http://www.biastatistics.statistics.unpad.ac.id/index.php/biastatistics/article/view/4.

[41] S. Suriani and C. N. Keusuma, "Pengaruh Pembangunan Infrastruktur Dasar terhadap Pertumbuhan Ekonomi di Indonesia," *ECOsains*, vol. 4, no. 1, pp. 1–18, 2015, [Online]. Available: http://ejournal.unp.ac.id/index.php/ekosains/article/view/109627.

[42] L. K. Manangkalangi, V. A. J. Masinambow, and R. L. H. Tumilaar, "Analisis Pengaruh PDRB Dan Inflasi terhadap Kemiskinan di Provinsi Sulawesi Tengah (2000-2018)," *J. Berk. Ilm. Efisiensi*, vol. 20, no. 03, pp. 66–78, 2020, [Online]. Available: https://ejournal.unsrat.ac.id/index.php/jbie/article/view/30643.

[43] M. U. BPS, "Pertumbuhan Ekonomi Maluku Utara Triwulan II-2020," *Badan Pusat Statistik Provinsi Maluku Utara*, 2020. https://malut.bps.go.id/pressrelease/2020/08/05/486/ekonomi-maluku-utara-triwulan-ii-2020-mengalami-kontraksi-sebesar-0-16-persen.html.

[44] M. A. Arilaha, "Commentary on Recent Developments in North Maluku, 2017-2019," *Asia Compet. Inst.*, [Online]. Available: http://repository.unkhair.ac.id/82/.

[45] P. C. H. Runtunuwu, "Analysis of Macroeconomic Indicators on the Farmer Exchange Rate of North Maluku Province: A Case Study of Smallholder Plantation Subsector," *Society*, vol. 8, no. 2, pp. 437–457, 2020, doi: 10.33019/society.v8i2.235.

[46] Peraturan Menteri Keuangan, *Peraturan Menteri Keuangan tentang Pengelolaan Keuangan Dana Desa*. Indonesia, 2020.

[47] Kemenkeu, *Kajian Fiskal Regional Triwulan III 2020*. 2020.

[48] M. U. BPS, "Pertumbuhan Ekonomi Maluku Utara Triwulan III-2020," 2020. [Online]. Available: https://malut.bps.go.id/pressrelease/2020/11/05/500/ekonomi-maluku-utara-triwulan-iii-2020-tumbuh-6-66-persen.html.

[49] Kemenkeu, "Kajian Fiskal Regional Triwulan III 2020," 2020. [Online]. Available: http://www.djpb.kemenkeu.go.id/portal/images/file_artikel/file_pdf/kfr/tw3_2020/32-KFR_TW3_2020_Maluku_Utara-min.pdf.