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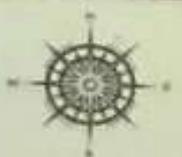
Devanto Pratomo

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Regional Perspectives of COVID-19 in Indonesia

IRSA BOOK SERIES ON REGIONAL DEVELOPMENT NO. 19



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in Indonesia**

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Regional Perspectives of COVID-19 in Indonesia

Penulis:

Indonesia Regional Science Association

Editor:

B. S. Nazamuddin, dkk

Design Sampul:

Arief Anshory Yusuf (gambar dari shutterstock.com)

Tata Letak:

Affandia Bimantara

Proofreader:

Lilies Achmadi

Diterbitkan oleh:

Perkumpulan Ilmu Regional Indonesia (IRSA)

Sekretariat IRSA, Jl. Cimandiri No. 6 Bandung 40115

West Java - Indonesia

Email: info@irsa.or.id

ISBN 978-623-94282-1-1

Cetakan pertama, Juli 2020

Hak Cipta dilindungi Undang-Undang.

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FOREWORD

The Indonesian economy remains mired in a pandemic recession with high unemployment, increased poverty, and worsening inequality, including the inequality between regions. While efforts to contain the pandemic and its impact remain convoluted, at the time of the writing of this Foreword the government's attention seems already shifting to an intriguing if indistinct prospect: a post COVID-19 recovery. Some even use the term 'post COVID-19 boom'. Yet, what is going on in the ground continues to be a source of serious concern. The country still endures more new infections and more deaths. There remains a gap between what is publicly announced and the actual policies taken with respect to which gets prioritized, the public health or the economy. Every time officials declare that the pandemic will not last "for a long time", the claim has always been overtaken by events, at least until now. Only because the test rates are lower the increase in infections slows.

It is gratifying that most articles in this timely book do not fall into the trap of forecasting or prognosticing a post COVID-19 boom. Instead, they discuss what has been going on with regards to the virus and its impact in various parts of Indonesia. The editors of the book made a wise decision. This is precisely what needs to be uncovered, openly and truthfully, before discussing the scenarios of recovery. After all, no one knows when this dreadful pandemic will end. Another encouraging feature of the articles throughout the book is highly consistent with the interest of astute regional scientists, economists, and public policy experts; they do not exclusively rely on aggregate growth measure. Except in chapter 3, where the authors' original intention was to distil the growth differences between regions, the rest of the book highlight various important aspects relevant to the regional development during the COVID-19 shock. They range from the political dimension of development such as the direct election of local leaders (PILKADA), the social aspects of development such as the social conflicts and mobility,

and the role of local wisdom and social capital in regional development. The bulk of Part 2 covers discussions as to how the public responded to official policies in different regions. These are all important affairs and embracing what is important to the public at large during this pandemic is the task for our time. This book could not be more relevant for those who wish to feel the pulse of society in different regions during this extraordinary event.

Iwan J Azis

Ithaca, NY, June 2021

Chapter 5

Community Mobilities in Indonesia during the COVID-19 Pandemic and the Case of Bali

Ni Nyoman Reni Suasih, Ida Ayu Nyoman Saskara, and Putu Yudy Wijaya

INTRODUCTION

The Corona Virus Disease-2019 (COVID-19) pandemic has spread throughout the world since the end of 2019. In response to this COVID-19 widespread, both intentional changes in behaviour and authoritative limitations on human intuitive have happened. Apart from government intervention that regulates physical distance and crowd avoidance, building awareness of individuals in community groups (especially through role leaders) is important to break the chain of the spread of COVID-19 (Fajar 2020). Lockdowns and voluntary social distancing made almost the same contribution in reducing mobility during the COVID-19 pandemic; however, voluntary social distancing has a smaller contribution among low-income earners due to limitations to work from their home (IMF 2020). These activities are aimed to decrease the transmission rate of corona virus. An expansive lessening in people mobility has been taken, both within the United States and universally. Within the US, expansive versatility diminishments have been identified

related with the onset of the COVID-19 danger and particular government orders (Warren and Skillman 2020).

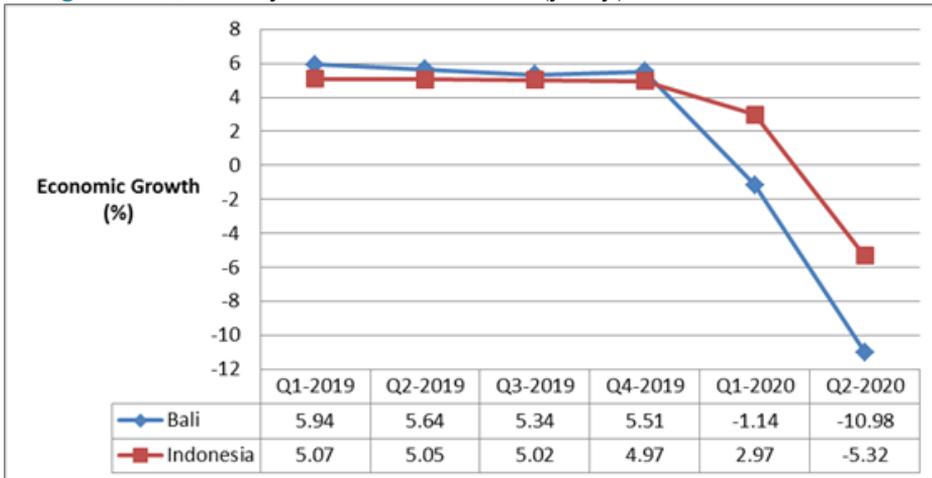
The mobility restrictions have an impact on the economy. This is evidenced by the results of the study by Bonaccorsi et al. (2020a) regarding the socio-economic consequences of human mobility restrictions under COVID-19. First, the effect of lockdown is more grounded in regions with higher financial capacity. Second, versatility withdrawal is more grounded in regions in which imbalance is higher and people have lower salary per capita. The results highlight both the social costs of lockdown and a challenge of uncommon concentrated. On the one hand, the emergency is actuating a sharp lessening of monetary incomes for both national and nearby governments; on the other hand, a critical monetary exertion is required to maintain the foremost delicate people and to relieve the increment in destitution and disparity initiated by the lockdown.

The COVID-19 pandemic has spreaded out in Indonesia as well. The Indonesian Government responded quickly to the pandemic by forming a Task Force for the Acceleration of Handling COVID-19 from the central to regional levels, as well as announcing social distancing policies and large-scale social restrictions (Siagian 2020) with the main target, i.e., to cut the chain of the Corona Virus spreading.

Community mobility in Indonesia has also changed. As shown by the Google Mobility Report data, in the mid-2020 community mobility in Indonesia had decreased to -19.25% and community mobility in residential areas had increased by 11%. Another impact from physical distancing and mobility restriction is that people are unable to travel as they used to be (Yuniti et al. 2020).

The impact of the COVID-19 pandemic can already be seen from the reduction of the economic growth since Q1-2020. Figure 1 shows the quarterly year-on-year (y-o-y) of Gross Domestic Product (GDP) in Indonesia. It can be seen that economic growth in Q1-2020 was only 2.97%, much lower than the economic growth in Q1-2019.

Figure 1. Quarterly Economic Growth (y-o-y) in Indonesia and Bali



Source: BPS (Badan Pusat Statistik or Statistics Indonesia), 2020.

This chapter aims to analyse the dynamics of community mobilities (at retail and recreation, at grocery and pharmacy, at parks, at transit stations, at work, and at residential places) in provinces throughout Indonesia during the COVID-19 pandemic. It is focused on the case study on the mobility of the Balinese, which is the lowest mobility in Indonesia. Furthermore, it will discuss the handling of COVID-19 in Bali which leads to the obedience of the Balinese people. Nonetheless, the mobility restriction in Bali has significant impact as Bali is a main tourist destination in Indonesia. The drastic decline in tourism activity due to restrictions on community mobility has caused the economy of Bali to plummet dramatically, even lower than the national average (Figure 1). In regards to mobility restriction, Balinese are very obedient in implementing health protocols as shown by the Google Mobility Report data in which the average community mobility in Bali is the lowest during the COVID-19 pandemic period (Table 1).

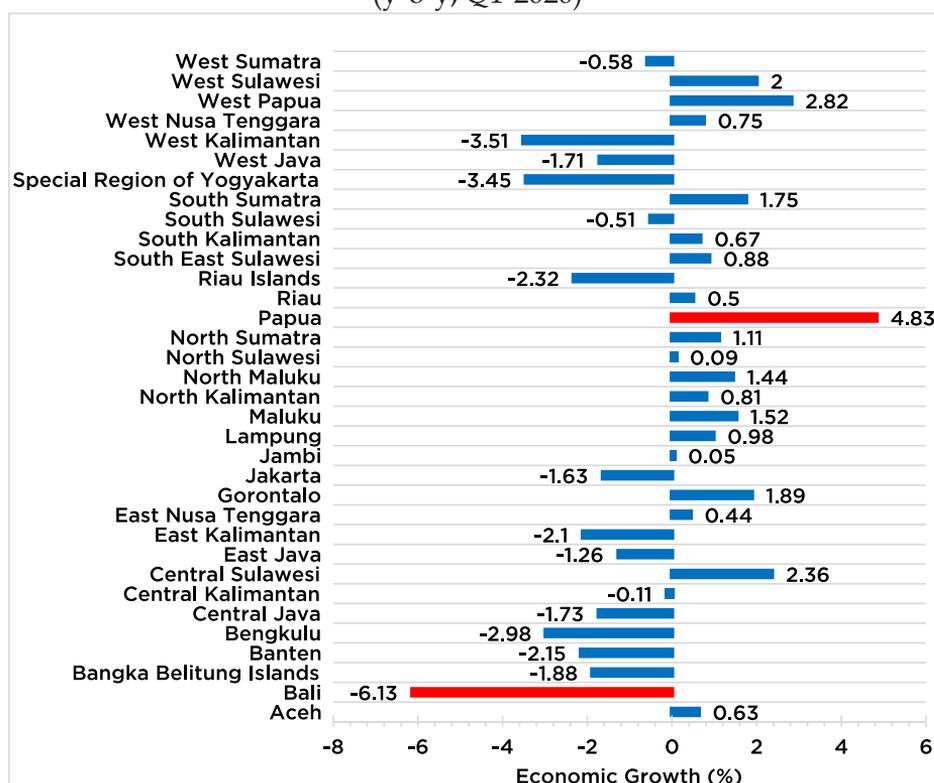
THE ECONOMY DURING THE COVID-19 PANDEMIC

Based on the current price of Q2-2020, the amount of Gross Domestic Product (GDP) of the Indonesian economy reached IDR 3,687.7 trillion. The Indonesian economy in Q2-2020 experienced a growth contraction

by 5.32% (y-o-y) compared to Q2-2019. From the production side, the Transportation and Warehousing Business Field experienced the highest growth contraction of 30.84%. From the expenditure side, the Components of Goods and Services Exports and Imports of Goods and Services experienced a growth contraction of 11.66% and 16.96% respectively (BPS 2020).

In Q2-2020, the economy contracted by 4.19% (q-t-q) compared to Q1-2020. From the production side, the Transportation and Warehousing Business Field experienced the highest growth contraction of 29.22%. Meanwhile, from the expenditure side, the components of goods and services exports and imports of goods and services experienced a growth contraction of 12.81% and 14.16% respectively (BPS 2020).

Figure 2. Distribution of Provincial Economic Growth in Indonesia (y-o-y, Q1-2020)



Source: BPS (Badan Pusat Statistik or Statistics Indonesia), 2020.

Compared to the previous year, the Indonesian economy in Q1-2020 experienced a contraction of 1.26% (c-t-c). From the production side, the biggest contraction in growth amounting to 15.07% occurred in the Transportation and Warehousing Business Field. Furthermore, from the expenditure side, all components contracted, with the highest contraction occurring in Consumption Expenditure for Non-Profit Institutions Serving Households (Pengeluaran Konsumsi Lembaga Non Profit yang melayani Rumah Tangga/PK-LNPRT) by 6.44% (BPS 2020).

Based on spatial data, the distribution of economic growth for each province in Indonesia is presented in Figure 2. It shows that in Q1-2020, Indonesia's provincial economic growth mostly experienced contraction. Bali Province experienced the highest contraction of economic growth, while the province with the highest economic growth was Papua which was supported by the mining sector.

MOBILITIES DURING THE COVID-19

Based on the Presidential instruction related to the handling and prevention of COVID-19 transmission, since 16 March 2020 the Central and Local Governments have applied restriction policy which limits people mobility by requiring them to stay at home.¹ The main target of that policy is to minimise the spreading of COVID-19.

As indicated in Figure 3, the Indonesian Government policy in handling and preventing the pandemic resulted in the fluctuations of community mobility in a number of sectors, such as Retail and Recreation, and Grocery and Pharmacy, as well as places, such as Parks, Transit Stations, Workplaces, and Residential.

1 <https://setkab.go.id/kebijakan-pemerintah-terkait-penanganan-dan-pencegahan-penularan-covid-19-16-maret-2020-di-istana-kepresidenan-bogor-provinsi-jawa-barat/>.

Figure 3. Fluctuation of Community Mobility in Indonesia (as of 31 August 2020)



Source: <https://datstudio.google.com/>

As seen in Figure 3, the average changes of community mobility in Residential is the highest, as the impact of the ‘stay at home’ policy. Meanwhile, community mobility in other places tends to decrease compared to the conditions before the COVID-19 pandemic.

As indicated in Table 1 which presents community mobility at provincial level in Q1/Q2-2020, Maluku Province experienced the highest decrease in community mobility at retail and recreation places (-47%) and also at grocery and pharmacy stores (-38%). Meanwhile, the highest decrease in community mobility at parks occurred in DKI Jakarta (-77%). Community mobility with the lowest drop in transit stations (-72%) and workplaces (-36%) took place in Bali.

Table 1. Community Mobility Changes of Each Province in Indonesia
(as of 30 June 2020 compared to baseline*)

No	Province	Mobility (Percent Change from Baseline)					
		Retail and Recreation	Grocery and Pharmacy	Parks	Transit Stations	Work-places	Residential
1	Aceh	-8	-1	-12	-36	-13	6
2	Bali	-36	-29	-50	-72	-36	16
3	Bangka Belitung	-16	1	-12	-47	-17	8
4	Banten	-11	3	5	-50	-26	13
5	Bengkulu	-3	4	-5	-41	-18	8
6	Central Java	-6	2	-9	-34	-20	12
7	Central Kalimantan	-17	-9	-20	-23	-17	8
8	Central Sulawesi	-9	-2	-5	-38	-14	8
9	DI Yogyakarta	-24	-17	-34	-57	-32	12
10	East Java	-11	-1	-14	-37	-23	12
11	East Kalimantan	-11	3	-5	-34	-17	9
12	East Nusa Tenggara	-11	-3	0	-27	-9	7
13	Gorontalo	-8	-5	20	-24	-16	10
14	DKI Jakarta	-27	-3	-77	-45	-33	14
15	Jambi	-10	3	-7	-27	-17	7
16	Lampung	-6	8	-12	-30	-23	8
17	Maluku	-47	-38	-31	-57	-31	16
18	North Kalimantan	-13	5	-10	-25	-12	8
19	North Maluku	-22	5	-20	-31	-15	9
20	North Sulawesi	-30	-9	-20	-40	-24	12
21	North Sumatera	-19	-7	-16	-36	-22	10
22	Papua	-24	-15	-17	-38	-15	9
23	Riau	-9	-3	-7	-39	-17	8
24	Riau Islands	-16	-7	-14	-57	-16	11
25	South East Sulawesi	-12	1	-15	-35	-14	8
26	South Kalimantan	-16	-8	-19	-38	-23	11
27	South Sulawesi	-20	-5	-10	-52	-26	11
28	South Sumatera	-13	-2	1	-41	-22	9
29	West Java	-23	9	-2	-29	-25	12

No	Province	Mobility (Percent Change from Baseline)					
		Retail and Recreation	Grocery and Pharmacy	Parks	Transit Stations	Work-places	Residential
30	West Kalimantan	-19	-6	-11	-36	-20	9
31	West Nusa Tenggara	-17	-6	-18	-53	-19	11
32	West Papua	-24	-13	-33	-50	-18	11
33	West Sulawesi	-10	-3	-20	-42	-12	9
34	West Sumatera	-7	6	-2	-31	-22	6

Source: <https://datastudio.google.com/> (2020)

*) A baseline day represents a normal value for that day of the week. The baseline day is the median value from the 5-week period 3 January– 6 February 2020.

In contrast, community mobility at residential has increased, and the highest took place in Bali (6%). In short, all regions in Indonesia have experienced steady decrease in community mobility. The areas with the highest decrease in community mobility during the COVID-19 pandemic was in Bali Province. See Table 1 above.

This chapter mainly aims to observe the dynamics of different types of provincial community mobility changes and provincial economic growth. The analysis employed cross section data on community mobility and economic growth of each province in Indonesia (Q1&Q2-2020). Economic growth data is obtained from Indonesia Statistic Central Agency (Badan Pusat Statistik/BPS Indonesia), or Statistics Indonesia (<https://www.bps.go.id/>). The data used is particularly on provincial economic growth during the COVID-19 pandemic (Q1&Q2-2020).

The data on the Google Mobility Report shows changes in visits to various places in each geographic area, where the cut-off for community mobility data used is mobility at the end of Q2-2020 (to adjust economic growth data). Community mobility is classified based on trends in people movement in: (1) retail and recreation places (mobility trends for places like restaurants, cafes, shopping centers, theme parks, museums, libraries, and movie theaters); (2) grocery and pharmacy stores (mobility trends for places like grocery markets, food warehouses, farmers markets, specialty food shops, drug stores, and pharmacies); (3) parks (mobility trends for places like national parks, public beaches, marinas,

dog parks, plazas, and public gardens); (4) transit stations (mobility trends for places like public transport hubs such as subway, bus, and train stations); (5) workplaces (mobility trends for places of work); and, (6) residential (mobility trends for places of residence).

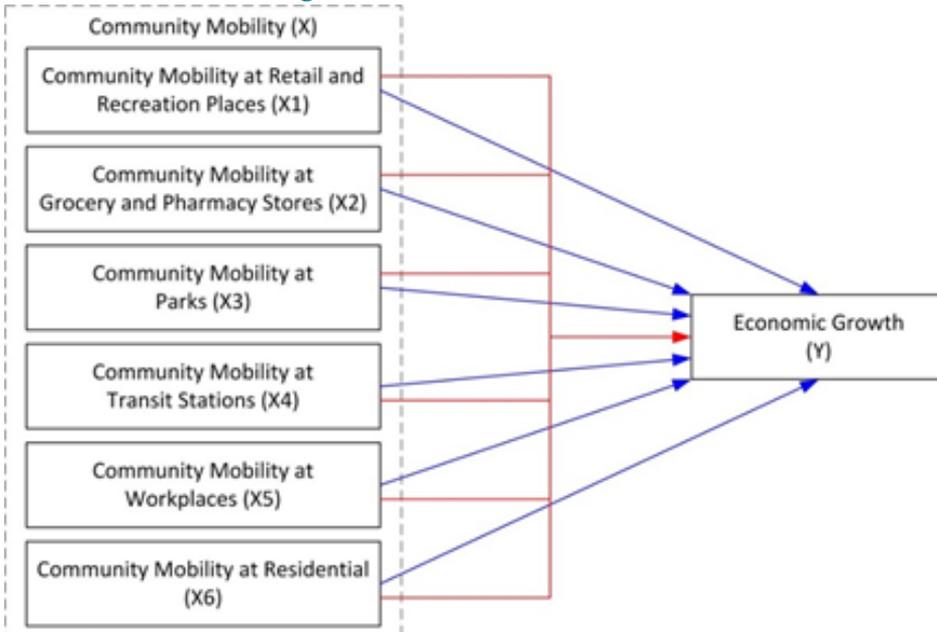
Social and mobility restrictions to reduce the spread of infection during the COVID-19 pandemic are expected to have a significant impact on economic conditions (Tran 2020). As mentioned before, the study by Bonaccorsi et al. (2020a) described that human mobility restrictions due to the COVID-19 pandemic have severely affected socio-economic condition. Bonaccorsi et al. (2020b) also undertook another study on evidence of economic segregation from locks on mobility during the COVID-19 epidemic in Italy. First, they find that the impact of lockdown is stronger in municipalities with higher fiscal capacity. Second, they also find a segregation effect, since mobility restrictions are stronger in municipalities where inequality is higher and most individuals have lower income per capita. Changes in behavior related to community mobility due to the COVID-19 pandemic have an impact not only on the changes in the way people socially interact, but also on important economic and social consequences (Fogli and Vedkamp 2019). If people move more often, the economic cycle level tend to increase significantly (Nandi 2018).

Conceptually the dynamics between community mobilities and the economy can be presented as in Figure 4 or loosely written as follows.

$$Y_i = \beta_0 + \beta_1.X1_i + \beta_2.X2_i + \beta_3.X3_i + \beta_4.X4_i + \beta_5.X5_i + \beta_6.X6_i + \varepsilon_i \quad (1)$$

where $X1_i$ is community mobility at retail and recreation places; $X2_i$ is community mobility at grocery and pharmacy stores; $X3_i$ is community mobility at the parks; $X4_i$ is community mobility at transit stations; $X5_i$ is community mobility at workplaces; $X6_i$ is community mobility at residential; Y_i is provincial economic growth measured by provincial GDP growth, in Q1 and Q2 of 2020. Furthermore, ε_i is an error term.

Figure 4. Research Framework



Although correlation among X_s are smaller than 0.8, we do acknowledge that there could be some colinearity issues with our results. We hence focus our analysis by observing the R-square to find out how good all different types of people mobilities are in explaining the variation of regional economic growth. The result of estimating Equation-1 with an Ordinary Least Square (OLS) method can be seen in Table 2.

Table 2. Correlations of Community Mobilities with Economic Growth in Indonesia

Dependent Variable: Economic Growth	Unstandardized Coefficients		t	p-value
		Std. Error		
(Constant)	5.380	1.803	2.984	0.006
Community mobility at retail and recreation	-0.058	0.071	-0.816	0.422
Community mobility at grocery and pharmacy	-0.064	0.060	-1.080	0.290
Community mobility at parks	0.001	0.027	0.049	0.961
Community mobility at transit stations	0.070	0.044	1.584	0.125
Community mobility at workplaces	0.189	0.086	2.188	0.038
Community mobility at residential	-0.019	0.253	-0.073	0.942
R-square	0.405			
n	34			

As shown in Table 2, approximately 40.5% of variation among provincial economic growth variables might be explained by various level of community mobilities in the province. The results in Table 2 also show that community mobilities at workplaces might be the most important in explaining provincial economic growth.²

COMMUNITY MOBILITY IN BALI DURING THE COVID-19 PANDEMIC

Bali Province is one of the favorite tourist destinations in Indonesia and even in the world (Antara and Sumarningsih 2017). From economic viewpoint, positive impacts of tourism in Bali are among others: (1) an important foreign exchange earner; (2) a potential advertise for products and administrations created by the local community; (3) providing economic feedback for communities who carry out activities related to services of tourism ; (4) to extend the work opportunity, either in direct-linkage segments such as inn, eatery, and travel agent, or at circuitous linkage segments such as craftsmanship industry, supply of rural create, social fascination, retail business, and the other benefit exercises; (5) as a source of region's roundabout charges; and, (6) to invigorate the artists' creativity, such as those in small-scale industry or in conventional performing expressions (Antara and Pitana 2009).

As previously explained that in the first six months of 2020, Bali's economic growth was the most contracted compared to other provinces in Indonesia. This is due to a decrease in tourism activity in Bali, especially until the end of Q2-2020 when international flights in Indonesia were still closed to prevent the spread of the corona virus transmitted by foreign tourists. If viewed based on RGDP Bali data in Q1-2020, and Q2-2020 (see Appendix 1), it can be seen that several sectors (industrial origin) experienced a deep contraction, such as: (1) transport and storage; (2) accomodation and food service activities, and (3) manufacturing.

² Important, however, to note that the result in Table 2 could be bias. The authors may need to add why the result may be biased and how it will affect the findings.

Table 3. Comparison of Data on the Progress of the Spread of COVID-19 in the Provinces of Bali and Indonesia (Q1&Q2-2020)

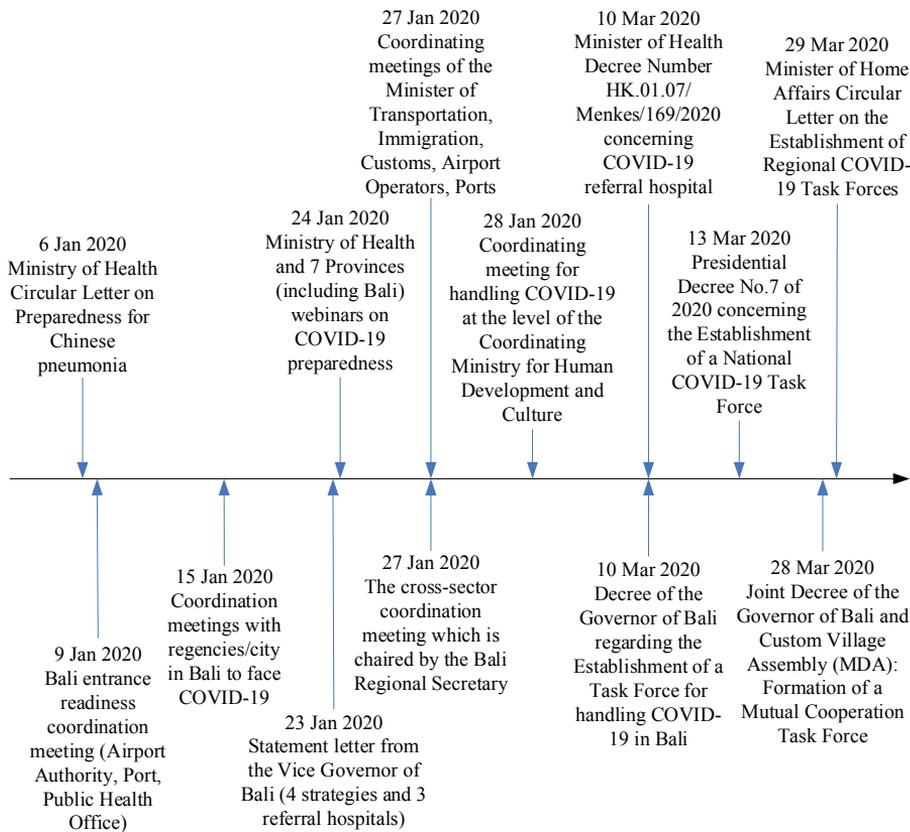
	Data of Bali Province	Data of Indonesia
The number increase of confirmed cases (from previous day)	30 cases	1,293 cases
Total confirmed cases (per 30 June 2020)	1,444 cases	56,385 cases
The number increase of recovered (from previous day)	12 people	1.006 people
Total recovered (per 30 June 2020)	783 people (54.22%)	24,806 people (43.99%)
The number increase of fatality (from previous day)	-	71 people
Total fatality (per 30 June 2020)	13 people (0.90%)	2,876 people (5.10%)

Source: <https://infocorona.baliprov.go.id>

The COVID-19 pandemic is still hitting Bali, and is expected to continue until the end of 2020. Bali Province was even one of 22 areas with a relatively fast spread when viewed from the level of virus reproduction (R_t)-i.e., over 1 (Dzakwan 2020). However, the COVID-19 pandemic in Bali has been quite well handled. Table 3 shows that the recovery rate for COVID-19 patients in Bali was relatively high since the beginning of its spread. In addition, Bali is also considered capable of controlling the number of fatality due to COVID-19 in which the number is very small compared to the percentage of fatality at the national level.

The Provincial Government of Bali is considered quite responsive and could manage to coordinate various parties in dealing with the COVID-19 pandemic. Responsiveness in this case can be seen from the preventive steps taken by Bali Province which are even faster than at the national level. As shown in Figure 5, there are at least four reasons why the Government of Bali perform better in anticipating the COVID-19 pandemic than the rest of provinces in Indonesia.

Figure 5. Differences of the Initial Response of Bali Province and Indonesia in Handling the COVID-19 Pandemic



Source: Dzakwan, 2020.

First, the Bali Province has promptly got prepared and established a COVID-19 referral hospital although confirmed positive cases were still non-existent in several areas then. Second, Bali has tightened screening at the entrance to the region. Third, the Bali Provincial Government had formed a special team for handling COVID-19 by involving various stakeholders (including customs). Fourth is related to the consolidation of the handling of COVID-19 that has been carried out by the Bali Provincial Government to the grass root level, such as villages and *banjars* (smaller territories of village).

The handling of COVID-19 in Bali Province is also supported by a policy of budget reallocation and refocusing of activities in the Local Government budget (Anggaran Pendapatan dan Belanja daerah/ APBD)

of Bali Province for the 2020 fiscal year amounting to IDR756,069,643,295. When viewed from the per capita budget allocation, Bali's budget for handling the impact of COVID-19 is IDR735,354 per capita. The Central Government also prepared a budget through the national economic recovery program to overcome the impact of COVID-19 of IDR 11,367,354 per capita. The budget was reallocated for three groups of activities to handle the COVID-19 pandemic as detailed in Table 4.

Table 4. Budget Reallocation and Activities Refocusing in the Bali Provincial Budget for the 2020 Fiscal Year

Handling of Health (IDR274,769,643,295)	Handling the Economics Impact (IDR220,000,000,000)	Handling in the Form of A Social Safety Net (IDR261,300,000,000)
<ol style="list-style-type: none"> 1. Custom village-based health care (IDR74,650,000,000) for COVID-19 prevention activities. 2. Health care by the Bali Provincial Task Force (IDR200,119,643,295) for: <ol style="list-style-type: none"> a. services at the COVID-19 referral hospital; b. procurement of health equipment in the context of preventing COVID-19; c. provision of quarantine places; d. incentive assistance for medical personnel; e. support for task force operational activities. 	<p>Handling/rescuing business activities due to the impact of COVID-19 which includes:</p> <ol style="list-style-type: none"> 1. Informal business groups, such as: traditional stalls, market traders, home industries, fishermen and livestock breeders; 2. Micro, small and medium enterprises (MSMEs) and cooperatives; 3. Print and online media business groups. (Assistance is provided in the form of a stimulus for business continuity) 	<ol style="list-style-type: none"> 1. Custom village-based social safety net program for the poor (IDR149,300,000,000); 2. Social safety net programme for the poor (IDR112,000,000,000) through: <ol style="list-style-type: none"> a. Poor families who do not receive routine government assistance programmes; b. Groups of formal workers who are laid off or laid off without pay; c. Informal group of workers; d. Assistance for students and undergraduate students whose parents have been affected by COVID-19.

Source: Bappeda Provinsi Bali, 2020

Furthermore, when viewed from the aspect of community mobility during the COVID-19 pandemic that has been previously described,

it can be seen that community mobility in Bali is generally the lowest compared to other provinces in Indonesia. A question arises: What causes people in Bali to be so obedient in implementing the appeal to “stay home”?

The Provincial Government of Bali responded quickly to the impact of COVID-19 by reallocating the 2020 budget for handling COVID-19 through policies in the fields of health, economy, and social safety nets. The policy scheme for handling the impact of COVID-19 in Bali is designed to involve Traditional Villages (Yasa 2020), especially in handling in the field of health and social safety nets. Almost every custom village (Desa Adat) has formed a Task Force for the Acceleration of Handling COVID-19 which operates at the grass root level. Pecalang (local security officers of a custom village in Bali) actively monitors residents who will enter and exit the traditional village and urge residents to implement health protocols with discipline.

The preserved Custom Villages as one of the local wisdoms in Bali are at the forefront of every government programme, because the Bali Provincial Government realizes that the Balinese people are very obedient to what is regulated by custom, and the community will feel ashamed if they accept customary sanctions. Therefore, it is very natural for the President to admit that the handling of COVID-19 in Bali is the best (Dzakwan 2020).

CONCLUSION

The COVID-19 pandemic did affect the Indonesia economy. Compared to the the economy in Q1 & Q2 - 2019, the economy in Q1 & Q2 of 2020 experienced a contraction by 1.26% (c-to-c). When viewed spatially, the Bali Province contracted the most and Papua province is the least affected province. Papua still grew as much as 4.8% due to its mining sector.

The Government main response to the COVID-19 pandemic is implemented through social restrictions by limiting community activities and mobility in the form of ‘stay at home’ policy. Based on the Google Mobility Report for Q1&Q2-2020, almost all community

mobilities – i.e., those at retail and recreation, at grocery and pharmacy, at parks, at transit stations, and at work – have declined. Only mobility at residential places have increased.

When viewed spatially, the highest decrease in community mobility at retail and recreation places (-47%) and also at grocery and pharmacy stores (-38%) took place in Maluku. Meanwhile, the highest decrease in community mobility at parks occurred in Jakarta (-77%). Community mobility in transit stations and workplaces with the lowest drop took place in Bali, i.e., -72% and -36% respectively. There is some indication that provincial community mobility – particularly community mobility at work places – and economic growth are strongly correlated.

The normal activities of community began to shift from “work at office” to the “work from home” (WFH) pattern. Due to such shift, people apparently are no longer able to produce output like they used to do in the normal situation. Since not all work can be done from home, it could be the reason why the Indonesian economy experienced a recession. In addition, the temporary suspension of tourism activities has also resulted in a decrease in people’s income and labor in the tourism sector. Therefore, the Government should develop more supports in order to increase the effectiveness of working at home. An example of these supports would be better internet connections, cheaper prices of mobile phone and personal computer and massive campaign to improve people ability in utilising internet and smart phones.

Community mobility in Bali has been the lowest in Indonesia, but Bali’s economic growth in the first six months of 2020 was also the lowest in Indonesia. The handling of COVID-19 in Bali Province is considered the best in Indonesia, even though Bali was previously a tourist destination with high community mobility. The compliance of the Balinese people to reduce mobility and optimal handling of COVID-19 in Bali is because the Bali Provincial Government involves traditional villages known as *Desa Adat* to carry out integrated control and also supervision of community mobility and handling of COVID-19. This can be used as an example to use local wisdom in the management of community life, given that many regions in Indonesia have high compliance with local wisdom values.

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APPENDIX

Appendix 1. RGDP (Trillion IDR), Growth Rate, and Source of Growth of RGDP by Industrial Origin of Bali Province, 2020

No	Industrial Origin	Current Prices		Constant Prices (2010)		Growth Rate (%)			Source of Growth (%)		
		Q1-2020	Q2-2020	Q1-2020	Q2-2020	Q2-2020 to Q1-2020 (q-to-q)	Q2-2020 to Q2-2019 (y-on-y)	C1-2020 to C1-2019 (c-to-c)	Q2-2020 to Q1-2020 (q-to-q)	Q2-2020 to Q2-2019 (y-on-y)	C1-2020 to C1-2020 (c-to-c)
1	Agriculture, forestry and fishery	8.28	8.54	5.16	5.37	4.17	-2.26	-1.14	0.56	-0.31	-0.15
2	Mining and quarrying	0.55	0.53	0.35	0.34	-3.69	-0.10	1.57	-0.03	0.00	0.01
3	Manufacturing	3.53	3.53	2.37	2.37	-0.07	-7.92	-7.94	0.00	-0.51	-0.51
4	Electricity and gas supply	0.15	0.12	0.09	0.07	-23.54	-21.04	-6.82	-0.05	-0.04	-0.01
5	Water supply, sewerage, waste management and remediation activities	0.11	0.11	0.08	0.08	0.04	-0.14	3.01	0.00	0.00	0.01
6	Construction	6.07	5.93	4.06	3.96	-2.37	-2.42	0.21	-0.25	-0.24	0.02
7	Wholesale and retail trades, repair of motor vehicles and motorcycles	5.19	5.17	3.61	3.59	-0.48	-5.90	-3.83	-0.04	-0.56	-0.36
8	Transport and storage	5.49	3.33	2.66	1.76	-33.74	-39.48	-23.07	-2.32	-2.86	-1.67
9	Accommodation and food service activities	13.22	9.40	7.14	5.36	-24.97	-33.10	-21.22	-4.62	-6.58	-4.24
10	Information and communication	3.49	3.51	3.02	3.05	0.76	6.24	6.82	0.06	0.44	0.49
11	Financial and insurance services	2.61	2.29	1.75	1.56	-10.71	-7.20	-0.04	-0.48	-0.30	0.00

No	Industrial Origin	Current Prices		Constant Prices (2010)		Growth Rate (%)			Source of Growth (%)		
		Q1-2020	Q2-2020	Q1-2020	Q2-2020	Q2-2020 to Q1-2020 (q-to-q)	Q2-2020 to Q2-2019 (y-on-y)	C1-2020 to C1-2019 (c-to-c)	Q2-2020 to Q1-2020 (q-to-q)	Q2-2020 to Q2-2019 (y-on-y)	C1-2020 to C1-2020 (c-to-c)
12	Real estate activities	2.49	2.47	1.88	1.87	-0.59	1.83	2.42	-0.03	0.08	0.11
13	Business services	0.66	0.64	0.44	0.43	-2.82	-3.64	-1.41	-0.03	-0.04	-0.02
14	Public administration and defence; compulsory social security	3.17	3.20	2.23	2.23	0.12	-0.02	3.43	0.01	0.00	0.19
15	Education	3.17	3.25	2.15	2.19	1.96	-0.26	-0.26	0.11	-0.01	-0.01
16	Human health and social work activities	1.45	1.44	1.02	1.00	-1.32	2.88	4.55	-0.03	0.07	0.11
17	Other services activities	0.98	0.96	0.64	0.62	-2.75	-7.23	-5.05	-0.05	-0.12	-0.08
	Total	60.60	54.43	38.65	35.86	-7.22	-10.98	-6.13	-7.22	-10.98	-6.13

Regional Perspectives of COVID-19 in Indonesia

In mid 2020, IRSA produced a call for papers inviting Indonesian academics to report and analyse issues related to the COVID-19 pandemic at regional level in Indonesia in order to provide regional perspectives on how the pandemic has affected local people, and how local people responded to this treat and what policy gaps seen from the regions.

Thirty-five academics responded to this call, resulting in these 15 selected chapters for this book. These chapters deal with inter-regions as well as specific region analysis. The specific region analyses cover from issues in large cities such as Jakarta, Yogyakarta and Manado to those in remote areas such as Tual islands, border areas of West Kalimantan and Papua.

The COVID-19 related issues in this book are rich, as they also include the issues of regional election, people mobilities, social capital, poverty and food prices.

For all the readers of this book: happy reading. Hope you learn more about Indonesia and its COVID-19 related issues.

Professor Arief A. Yusuf

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Community Mobilities in Indonesia during the COVID-19 Pandemic and the Case of Bali

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Submission date: 03-Oct-2021 09:14AM (UTC+0700)

Submission ID: 1663544588

File name: Chapter5.pdf (606.54K)

Word count: 5625

Character count: 28856

Chapter 5

Community Mobilities in Indonesia during the COVID-19 Pandemic and the Case of Bali

Ni Nyoman Reni Suasih, Ida Ayu Nyoman Saskara, and Putu Yudy Wijaya

INTRODUCTION

The Corona Virus Disease-2019 (COVID-19) pandemic has spread throughout the world since the end of 2019. In response to this COVID-19 widespread, both intentional changes in behaviour and authoritative limitations on human intuitive have happened. Apart from government intervention that regulates physical distance and crowd avoidance, building awareness of individuals in community groups (especially through role leaders) is important to break the chain of the spread of COVID-19 (Fajar 2020). Lockdowns and voluntary social distancing made almost the same contribution in reducing mobility during the COVID-19 pandemic; however, voluntary social distancing has a smaller contribution among low-income earners due to limitations to work from their home (IMF 2020). These activities are aimed to decrease the transmission rate of corona virus. An expansive lessening in people mobility has been taken, both within the United States and universally. Within the US, expansive versatility diminishments have been identified

related with the onset of the COVID-19 danger and particular government orders (Warren and Skillman 2020).

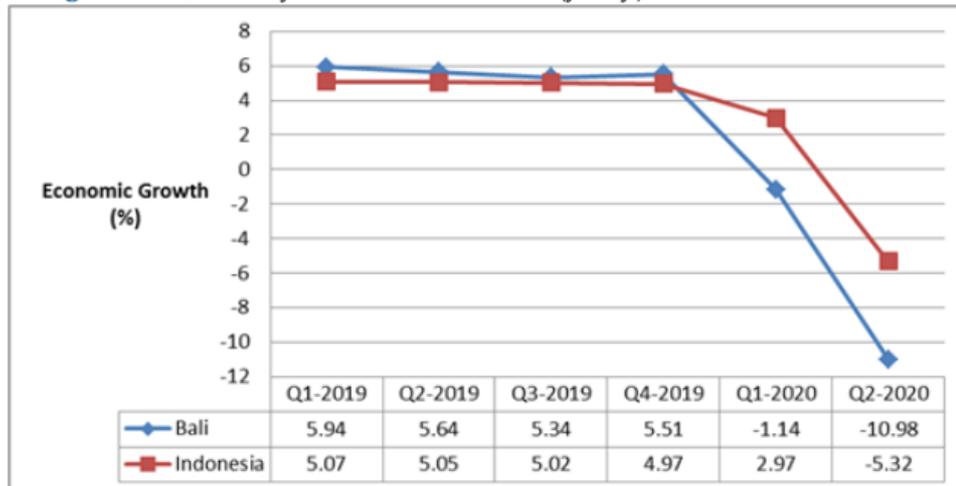
The mobility restrictions have an impact on the economy. This is evidenced by the results of the study by Bonaccorsi et al. (2020a) regarding the socio-economic consequences of human mobility restrictions under COVID-19. First, the effect of lockdown is more grounded in regions with higher financial capacity. Second, versatility withdrawal is more grounded in regions in which imbalance is higher and people have lower salary per capita. The results highlight both the social costs of lockdown and a challenge of uncommon concentrated. On the one hand, the emergency is actuating a sharp lessening of monetary incomes for both national and nearby governments; on the other hand, a critical monetary exertion is required to maintain the foremost delicate people and to relieve the increment in destitution and disparity initiated by the lockdown.

The COVID-19 pandemic has spreaded out in Indonesia as well. The Indonesian Government responded quickly to the pandemic by forming a Task Force for the Acceleration of Handling COVID-19 from the central to regional levels, as well as announcing social distancing policies and large-scale social restrictions (Siagian 2020) with the main target, i.e., to cut the chain of the Corona Virus spreading.

Community mobility in Indonesia has also changed. As shown by the Google Mobility Report data, in the mid-2020 community mobility in Indonesia had decreased to -19.25% and community mobility in residential areas had increased by 11%. Another impact from physical distancing and mobility restriction is that people are unable to travel as they used to be (Yuniji et al. 2020).

The impact of the COVID-19 pandemic can already be seen from the reduction of the economic growth since Q1-2020. Figure 1 shows the quarterly year-on-year (y-o-y) of Gross Domestic Product (GDP) in Indonesia. It can be seen that economic growth in Q1-2020 was only 2.97%, much lower than the economic growth in Q1-2019.

Figure 1. Quarterly Economic Growth (y-o-y) in Indonesia and Bali



Source: BPS (Badan Pusat Statistik or Statistics Indonesia), 2020.

⁷This chapter aims to analyse the dynamics of community mobilities (at retail and recreation, at grocery and pharmacy, at parks, at transit stations, at work, and at residential places) in provinces throughout Indonesia during the COVID-19 pandemic. It is focused on the case study on the mobility of the Balinese, which is the lowest mobility in Indonesia. Furthermore, it will discuss the handling of COVID-19 in Bali which leads to the obedience of the Balinese people. Nonetheless, the mobility restriction in Bali has significant impact as Bali is a main tourist destination in Indonesia. The drastic decline in tourism activity due to restrictions on community mobility has caused the economy of Bali to plummet dramatically, even lower than the national average (Figure 1). In regards to mobility restriction, Balinese are very obedient in implementing health protocols as shown by the Google Mobility Report data in which the average community mobility in Bali is the lowest during the COVID-19 pandemic period (Table 1).

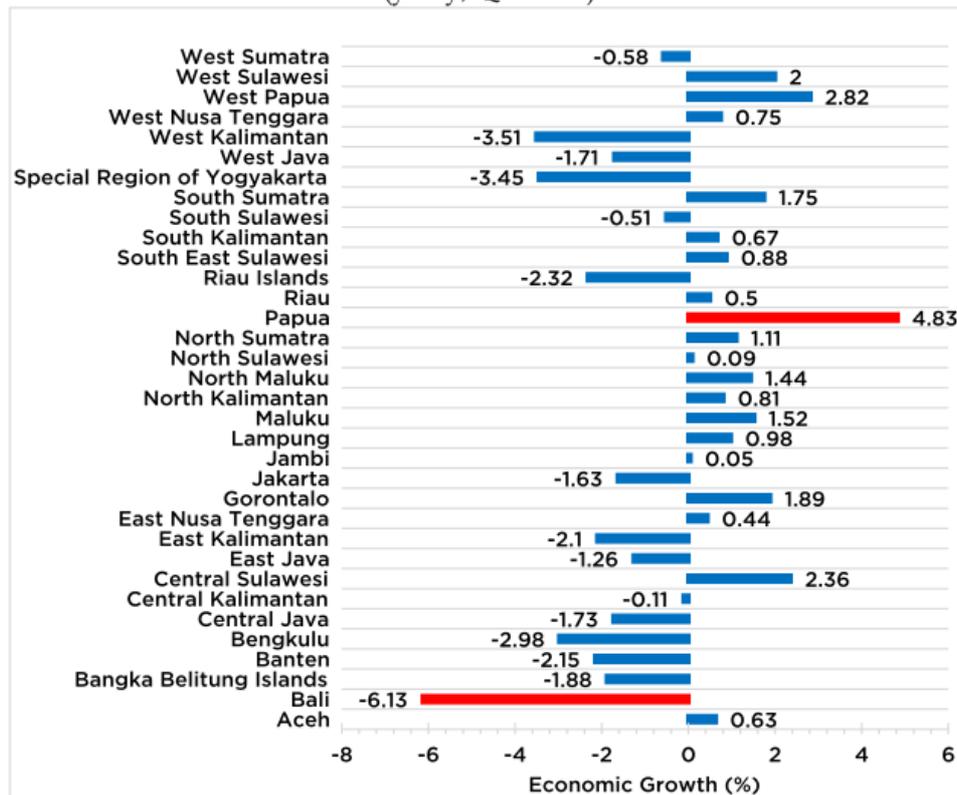
³² THE ECONOMY DURING THE COVID-19 PANDEMIC

⁵Based on the current price of Q2-2020, the amount of Gross Domestic Product (GDP) of the Indonesian economy reached IDR 3,687.7 trillion. The Indonesian economy in Q2-2020 experienced a growth contraction

by 5.32% (y-o-y) compared to Q2-2019. From the production side, the Transportation and Warehousing Business Field experienced the highest growth contraction of 30.84%. From the expenditure side, the Components of Goods and Services Exports and Imports of Goods and Services experienced a growth contraction of 11.66% and 16.96% respectively (BPS 2020).

In Q2 2020, the economy contracted by 4.19% (q-t-q) compared to Q1-2020. From the production side, the Transportation and Warehousing Business Field experienced the highest growth contraction of 29.22%. Meanwhile, from the expenditure side, the components of goods and services exports and imports of goods and services experienced a growth contraction of 12.81% and 14.16% respectively (BPS 2020).

Figure 2. Distribution of Provincial Economic Growth in Indonesia (y-o-y, Q1-2020)



Source: BPS (Badan Pusat Statistik or Statistics Indonesia), 2020.

9
2
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21
2

Compared to the previous year, the Indonesian economy in Q1-2020 experienced a contraction of 1.26% (c-t-c). From the production side, the biggest contraction in growth amounting to 15.07% occurred in the Transportation and Warehousing Business Field. Furthermore, from the expenditure side, all components contracted, with the highest contraction occurring in Consumption Expenditure for Non-Profit Institutions Serving Households (Pengeluaran Konsumsi Lembaga Non Profit yang melayani Rumah Tangga/PK-LNPRT) by 6.44% (BPS 2020).

Based on spatial data, the distribution of economic growth for each province in Indonesia is presented in Figure 2. It shows that in Q1-2020, Indonesia's provincial economic growth mostly experienced contraction. Bali Province experienced the highest contraction of economic growth, while the province with the highest economic growth was Papua which was supported by the mining sector.

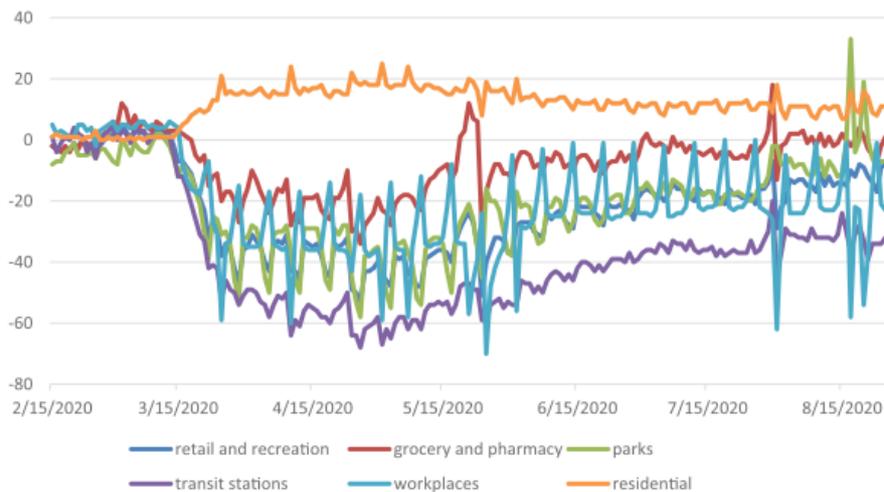
MOBILITIES DURING THE COVID-19

Based on the Presidential instruction related to the handling and prevention of COVID-19 transmission, since 16 March 2020 the Central and Local Governments have applied restriction policy which limits people mobility by requiring them to stay at home.¹ The main target of that policy is to minimise the spreading of COVID-19.

As indicated in Figure 3, the Indonesian Government policy in handling and preventing the pandemic resulted in the fluctuations of community mobility in a number of sectors, such as Retail and Recreation, and Grocery and Pharmacy, as well as places, such as Parks, Transit Stations, Workplaces, and Residential.

29
1 <https://setkab.go.id/kebijakan-pemerintah-terkait-penanganan-dan-pencegahan-penularan-covid-19-16-maret-2020-di-istana-kepresidenan-bogor-provinsi-jawa-barat/>.

Figure 3. Fluctuation of Community Mobility in Indonesia (as of 31 August 2020)



Source: <https://datastudio.google.com/>

As seen in Figure 3, the average changes of community mobility in Residential is the highest, as the impact of the 'stay at home' policy. Meanwhile, community mobility in other places tends to decrease compared to the conditions before the COVID-19 pandemic.

As indicated in Table 1 which presents community mobility at provincial level in Q1/Q2-2020, Maluku Province experienced the highest decrease in community mobility at retail and recreation places (-47%) and also at grocery and pharmacy stores (-38%). Meanwhile, the highest decrease in community mobility at parks occurred in DKI Jakarta (-77%). Community mobility with the lowest drop in transit stations (-72%) and workplaces (-36%) took place in Bali.

Table 1. Community Mobility Changes of Each Province in Indonesia
(as of 30 June 2020 compared to baseline*)

No	Province	7 Mobility (Percent Change from Baseline)					
		Retail and Recreation	Grocery and Pharmacy	Parks	Transit Stations	Work-places	Residential
1	Aceh	-8	-1	-12	-36	-13	6
2	Bali	-36	-29	-50	-72	-36	16
3	Bangka Belitung	-16	1	-12	-47	-17	8
4	Banten	-11	3	5	-50	-26	13
5	Bengkulu	-3	4	-5	-41	-18	8
6	Central Java	-6	2	-9	-34	-20	12
7	Central Kalimantan	-17	-9	-20	-23	-17	8
8	Central Sulawesi	-9	-2	-5	-38	-14	8
9	DI Yogyakarta	-24	-17	-34	-57	-32	12
10	East Java	-11	-1	-14	-37	-23	12
11	East Kalimantan	-11	3	-5	-34	-17	9
12	East Nusa Tenggara	-11	-3	0	-27	-9	7
13	Gorontalo	-8	-5	20	-24	-16	10
14	DKI Jakarta	-27	-3	-77	-45	-33	14
15	Jambi	-10	3	-7	-27	-17	7
16	Lampung	-6	8	-12	-30	-23	8
17	Maluku	-47	-38	-31	-57	-31	16
18	North Kalimantan	-13	5	-10	-25	-12	8
19	North Maluku	-22	5	-20	-31	-15	9
20	North Sulawesi	-30	-9	-20	-40	-24	12
21	North Sumatera	-19	-7	-16	-36	-22	10
22	Papua	-24	-15	-17	-38	-15	9
23	Riau	-9	-3	-7	-39	-17	8
24	Riau Islands	-16	-7	-14	-57	-16	11
25	South East Sulawesi	-12	1	-15	-35	-14	8
26	South Kalimantan	-16	-8	-19	-38	-23	11
27	South Sulawesi	-20	-5	-10	-52	-26	11
28	South Sumatera	-13	-2	1	-41	-22	9
29	West Java	-23	9	-2	-29	-25	12

No	Province	7 Mobility (Percent Change from Baseline)					
		Retail and Recreation	Grocery and Pharmacy	Parks	Transit Stations	Work-places	Residential
30	West Kalimantan	-19	-6	-11	-36	-20	9
31	West Nusa Tenggara	-17	-6	-18	-53	-19	11
32	West Papua	-24	-13	-33	-50	-18	11
33	West Sulawesi	-10	-3	-20	-42	-12	9
34	West Sumatera	-7	6	-2	-31	-22	6

Source: <https://datastudio.google.com/> (2020)

*) A baseline day represents a normal value for that day of the week. The baseline day is the median value from the 5-week period 3 January – 6 February 2020.

In contrast, community mobility at residential has increased, and the highest took place in Bali (6%). In short, all regions in Indonesia have experienced steady decrease in community mobility. The areas with the highest decrease in community mobility during the COVID-19 pandemic was in Bali Province. See Table 1 above.

This chapter mainly aims to observe the dynamics of different types of provincial community mobility changes and provincial economic growth. The analysis employed cross section data on community mobility and economic growth of each province in Indonesia (Q1&Q2-2020). Economic growth data is obtained from Indonesia Statistic Central Agency (Badan Pusat Statistik/BPS Indonesia), or Statistics Indonesia (<https://www.bps.go.id/>). The data used is particularly on provincial economic growth during the COVID-19 pandemic (Q1&Q2-2020).

The data on the Google Mobility Report shows changes in visits to various places in each geographic area, where the cut-off for community mobility data used is mobility at the end of Q2-2020 (to adjust economic growth data). Community mobility is classified based on trends in people movement in: (1) retail and recreation places (mobility trends for places like restaurants, cafes, shopping centers, theme parks, museums, libraries, and movie theaters); (2) grocery and pharmacy stores (mobility trends for places like grocery markets, food warehouses, farmers markets, specialty food shops, drug stores, and pharmacies); (3) parks (mobility trends for places like national parks, public beaches, marinas,

dog parks, plazas, and public gardens); (4) transit stations (mobility trends for places like public transport hubs such as subway, bus, and train stations); (5) workplaces (mobility trends for places of work); and, (6) residential (mobility trends for places of residence).

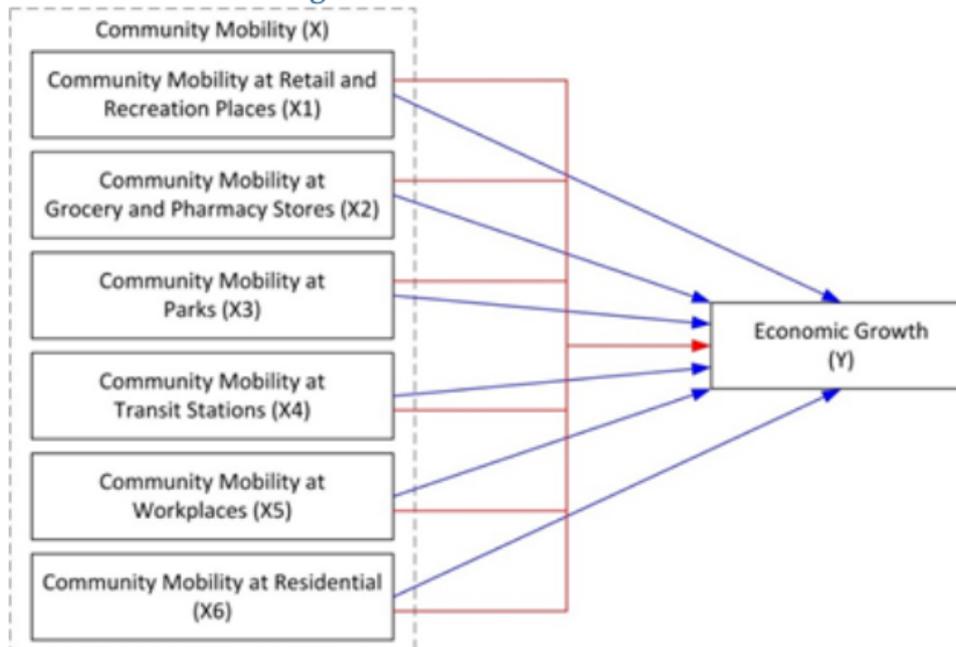
Social and mobility restrictions to reduce the spread of infection during the COVID-19 pandemic are expected to have a significant impact on economic conditions (Tran 2020). As mentioned before, the study by Bonaccorsi et al. (2020a) described that human mobility restrictions due to the COVID-19 pandemic have severely affected socio-economic condition. Bonaccorsi et al. (2020b) also undertook another study on evidence of economic segregation from locks on mobility during the COVID-19 epidemic in Italy. First, they find that the impact of lockdown is stronger in municipalities with higher fiscal capacity. Second, they also find a segregation effect, since mobility restrictions are stronger in municipalities where inequality is higher and most individuals have lower income per capita. Changes in behavior related to community mobility due to the COVID-19 pandemic have an impact not only on the changes in the way people socially interact, but also on important economic and social consequences (Fogli and Vedkamp 2019). If people move more often, the economic cycle level tend to increase significantly (Nandi 2018).

Conceptually the dynamics between community mobilities and the economy can be presented as in Figure 4 or loosely written as follows.

$$Y_i = \beta_0 + \beta_1.X1_i + \beta_2.X2_i + \beta_3.X3_i + \beta_4.X4_i + \beta_5.X5_i + \beta_6.X6_i + \varepsilon_i \quad (1)$$

where $X1_i$ is community mobility at retail and recreation places; $X2_i$ is community mobility at grocery and pharmacy stores; $X3_i$ is community mobility at the parks; $X4_i$ is community mobility at transit stations; $X5_i$ is community mobility at workplaces; $X6_i$ is community mobility at residential; Y_i is provincial economic growth measured by provincial GDP growth, in Q1 and Q2 of 2020. Furthermore, ε_i is an error term.

Figure 4. Research Framework



Although correlation among Xs are smaller than 0.8, we do acknowledge that there could be some colinearity issues with our results. We hence focus our analysis by observing the R-square to find out how good all different types of people mobilities are in explaining the variation of regional economic growth. The result¹² of estimating Equation-1 with an Ordinary Least Square (OLS) method can be seen in Table 2.

Table 2. Correlations of Community Mobilities with Economic Growth in Indonesia

Dependent Variable: Economic Growth	Unstandardized Coefficients		t	p-value
		Std. Error		
(Constant)	5.380	1.803	2.984	0.006
Community mobility at retail and recreation	-0.058	0.071	-0.816	0.422
Community mobility at grocery and pharmacy	-0.064	0.060	-1.080	0.290
Community mobility at parks	0.001	0.027	0.049	0.961
Community mobility at transit stations	0.070	0.044	1.584	0.125
Community mobility at workplaces	0.189	0.086	2.188	0.038
Community mobility at residential	-0.019	0.253	-0.073	0.942
R-square	0.405			
n	34			

As shown in Table 2, approximately 40.5% of variation among provincial economic growth variables might be explained by various level of community mobilities in the province. The results in Table 2 also show that community mobilities at workplaces might be the most important in explaining provincial economic growth.²

COMMUNITY MOBILITY IN BALI DURING THE COVID-19 PANDEMIC

Bali Province is one of the favorite tourist destinations in Indonesia and even in the world (Antara and Sumarningsih 2017). From economic viewpoint, positive impacts of tourism in Bali are among others: (1) an important foreign exchange earner; (2) a potential advertise for products and administrations created by the local community; (3) providing economic feedback for communities who carry out activities related to services of tourism; (4) to extend the work opportunity, either in direct-linkage segments such as inn, eatery, and travel agent, or at circuitous linkage segments such as craftsmanship industry, supply of rural create, social fascination, retail business, and the other benefit exercises; (5) as a source of region's roundabout charges; and, (6) to invigorate the artists' creativity, such as those in small-scale industry or in conventional performing expressions (Antara and Pitana 2009).

As previously explained that in the first six months of 2020, Bali's economic growth was the most contracted compared to other provinces in Indonesia. This is due to a decrease in tourism activity in Bali, especially until the end of Q2-2020 when international flights in Indonesia were still closed to prevent the spread of the corona virus transmitted by foreign tourists. If viewed based on RGDP Bali data in Q1-2020, and Q2-2020 (see Appendix 1), it can be seen that several sectors (industrial origin) experienced a deep contraction, such as: (1) transport and storage; (2) accomodation and food service activities, and (3) manufacturing.

² Important, however, to note that the result in Table 2 could be bias. The authors may need to add why the result may be biased and how it will affect the findings.

Table 3. Comparison of Data on the Progress of the Spread of COVID-19 in the Provinces of Bali and Indonesia (Q1&Q2-2020)

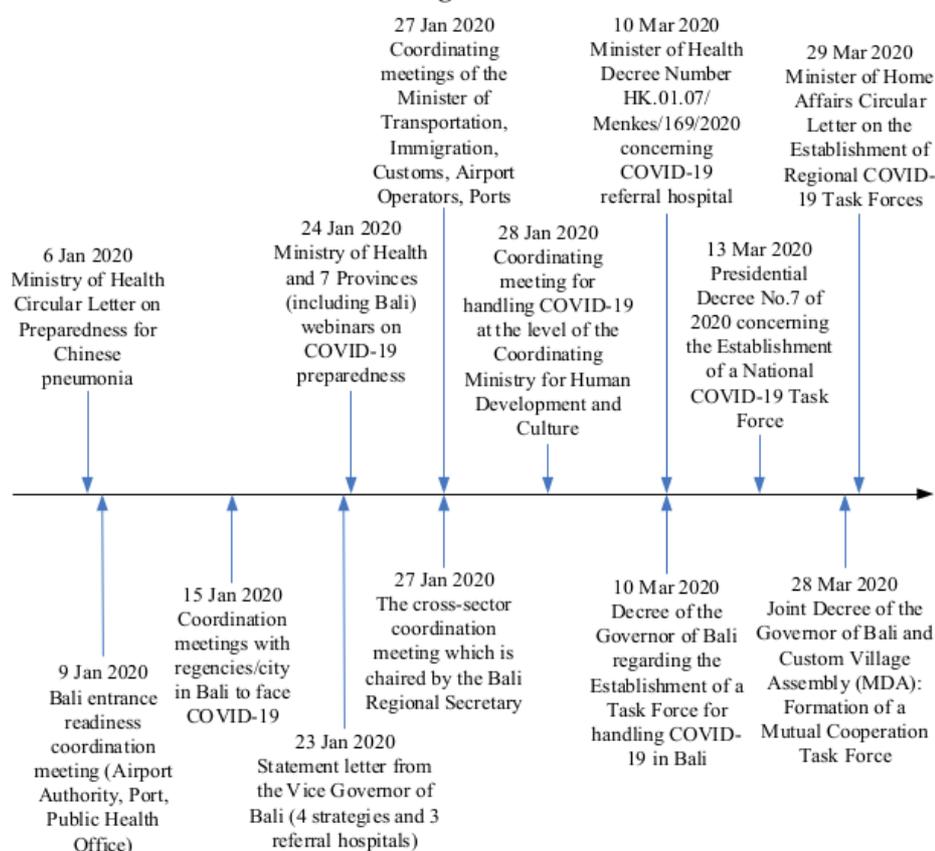
	Data of Bali Province	Data of Indonesia
The number increase of confirmed cases (from previous day)	30 cases	1,293 cases
Total confirmed cases (per 30 June 2020)	1,444 cases	56,385 cases
The number increase of recovered (from previous day)	12 people	1.006 people
Total recovered (per 30 June 2020)	783 people (54.22%)	24,806 people (43.99%)
The number increase of fatality (from previous day)	-	71 people
Total fatality (per 30 June 2020)	13 people (0.90%)	2.876 people (5.10%)

Source: <https://infocorona.baliprov.go.id>

The COVID-19 pandemic is still hitting Bali, and is expected to continue until the end of 2020. Bali Province was even one of 22 areas with a relatively fast spread when viewed from the level of virus reproduction (R_t)—i.e., over 1 (Dzakwan 2020). However, the COVID-19 pandemic in Bali has been quite well handled. Table 3 shows that the recovery rate for COVID-19 patients in Bali was relatively high since the beginning of its spread. In addition, Bali is also considered capable of controlling the number of fatality due to COVID-19 in which the number is very small compared to the percentage of fatality at the national level.

The Provincial Government of Bali is considered quite responsive and could manage to coordinate various parties in dealing with the COVID-19 pandemic. Responsiveness in this case can be seen from the preventive steps taken by Bali Province which are even faster than at the national level. As shown in Figure 5, there are at least four reasons why the Government of Bali perform better in anticipating the COVID-19 pandemic than the rest of provinces in Indonesia.

Figure 5. Differences of the Initial Response of Bali Province and Indonesia in Handling the COVID-19 Pandemic



Source: Dzakwan, 2020.

First, the Bali Province has promptly got prepared and established a COVID-19 referral hospital although confirmed positive cases were still non-existent in several areas then. Second, Bali has tightened screening at the entrance to the region. Third, the Bali Provincial Government had formed a special team for handling COVID-19 by involving various stakeholders (including customs). Fourth is related to the consolidation of the handling of COVID-19 that has been carried out by the Bali Provincial Government to the grass root level, such as villages and *banjars* (smaller territories of village).

The handling of COVID-19 in Bali Province is also supported by a policy of budget reallocation and refocusing of activities in the Local Government budget (Anggaran Pendapatan dan Belanja daerah/APBD)

of Bali Province for the 2020 fiscal year amounting to IDR756,069,643,295. When viewed from the per capita budget allocation, Bali's budget for handling the impact of COVID-19 is IDR735,354 per capita. The Central Government also prepared a budget through the national economic recovery program to overcome the impact of COVID-19 of IDR 11,367,354 per capita. The budget was reallocated for three groups of activities to handle the COVID-19 pandemic as detailed in Table 4.

Table 4. Budget Reallocation and Activities Refocusing in the Bali Provincial Budget for the 2020 Fiscal Year

Handling of Health (IDR274,769,643,295)	Handling the Economics Impact (IDR220,000,000,000)	Handling in the Form of A Social Safety Net (IDR261,300,000,000)
<ol style="list-style-type: none"> 1. Custom village-based health care (IDR74,650,000,000) for COVID-19 prevention activities. 2. Health care by the Bali Provincial Task Force (IDR200,119,643,295) for: <ol style="list-style-type: none"> a. services at the COVID-19 referral hospital; b. procurement of health equipment in the context of preventing COVID-19; c. provision of quarantine places; d. incentive assistance for medical personnel; e. support for task force operational activities. 	Handling/rescuing business activities due to the impact of COVID-19 which includes: <ol style="list-style-type: none"> 1. Informal business groups, such as: traditional stalls, market traders, home industries, fishermen and livestock breeders; 2. Micro, small and medium enterprises (MSMEs) and cooperatives; 3. Print and online media business groups. (Assistance is provided in the form of a stimulus for business continuity) 	<ol style="list-style-type: none"> 1. Custom village-based social safety net program for the poor (IDR149,300,000,000); 2. Social safety net programme for the poor (IDR112,000,000,000) through: <ol style="list-style-type: none"> a. Poor families who do not receive routine government assistance programmes; b. Groups of formal workers who are laid off or laid off without pay; c. Informal group of workers; d. Assistance for students and undergraduate students whose parents have been affected by COVID-19.

Source: Bappeda Provinsi Bali, 2020

Furthermore, when viewed from the aspect of community mobility during the COVID-19 pandemic that has been previously described,

it can be seen that community mobility in Bali is generally the lowest compared to other provinces in Indonesia. A question arises: What causes people in Bali to be so obedient in implementing the appeal to “stay home”?

The Provincial Government of Bali responded quickly to the impact of COVID-19 by reallocating the 2020 budget for handling COVID-19 through policies in the fields of health, economy, and social safety nets. The policy scheme for handling the impact of COVID-19 in Bali is designed to involve Traditional Villages (Yasa 2020), especially in handling in the field of health and social safety nets. Almost every custom village (Desa Adat) has formed a Task Force for the Acceleration of Handling COVID-19 which operates at the grass root level. Pecalang (local security officers of a custom village in Bali) actively monitors residents who will enter and exit the traditional village and urge residents to implement health protocols with discipline.

The preserved Custom Villages as one of the local wisdoms in Bali are at the forefront of every government programme, because the Bali Provincial Government realizes that the Balinese people are very obedient to what is regulated by custom, and the community will feel ashamed if they accept customary sanctions. Therefore, it is very natural for the President to admit that the handling of COVID-19 in Bali is the best (Dzakwan 2020).

CONCLUSION

The COVID-19 pandemic did affect the Indonesia economy. Compared to the the economy in Q1 & Q2 - 2019, the economy in Q1 & Q2 of 2020 experienced a contraction by 1.26% (c-to-c). When viewed spatially, the Bali Province contracted the most and Papua province is the least affected province. Papua still grew as much as 4.8% due to its mining sector.

The Government main response to the COVID-19 pandemic is implemented through social restrictions by limiting community activities and mobility in the form of ‘stay at home’ policy. Based on the Google Mobility Report for Q1&Q2-2020, almost all community

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mobilities – i.e., those at retail and recreation, at grocery and pharmacy, at parks, at transit stations, and at work – have declined. Only mobility at residential places have increased.

When viewed spatially, the highest decrease in community mobility at retail and recreation places (-47%) and also at grocery and pharmacy stores (-38%) took place in Maluku. Meanwhile, the highest decrease in community mobility at parks occurred in Jakarta (-77%). Community mobility in transit stations and workplaces with the lowest drop took place in Bali, i.e., -72% and -36% respectively. There is some indication that provincial community mobility – particularly community mobility at work places – and economic growth are strongly correlated.

The normal activities of community began to shift from “work at office” to the “work from home” (WFH) pattern. Due to such shift, people apparently are no longer able to produce output like they used to do in the normal situation. Since not all work can be done from home, it could be the reason why the Indonesian economy experienced a recession. In addition, the temporary suspension of tourism activities has also resulted in a decrease in people’s income and labor in the tourism sector. Therefore, the Government should develop more supports in order to increase the effectiveness of working at home. An example of these supports would be better internet connections, cheaper prices of mobile phone and personal computer and massive campaign to improve people ability in utilising internet and smart phones.

14 Community mobility in Bali has been the lowest in Indonesia, but Bali’s economic growth in the first six months of 2020 was also the lowest in Indonesia. The handling of COVID-19 in Bali Province is considered the best in Indonesia, even though Bali was previously a tourist destination with high community mobility. The compliance of the Balinese people to reduce mobility and optimal handling of COVID-19 in Bali is because the Bali Provincial Government involves traditional villages known as Desa Adat to carry out integrated control and also supervision of community mobility and handling of COVID-19. This can be used as an example to use local wisdom in the management of community life, given that many regions in Indonesia have high compliance with local wisdom values.

4

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APPENDIX

Appendix 1. RGDP (Trillion IDR), Growth Rate, and Source of Growth of RGDP by Industrial Origin of Bali Province, 2020

No	Industrial Origin	Current Prices		Constant Prices (2010)		Growth Rate (%)			Source of Growth (%)				
		Q1-2020	Q2-2020	Q1-2020	Q2-2020	Q2-2020 to Q1-2020 (q-to-q)							
1	Agriculture, forestry and fishery	8.28	8.54	5.16	5.37	4.17	4.17	-2.26	-1.14	0.56	0.56	-0.31	-0.15
2	Mining and quarrying	0.55	0.53	0.35	0.34	-3.69	-3.69	-0.10	1.57	-0.03	-0.03	0.00	0.01
3	Manufacturing	3.53	3.53	2.37	2.37	-0.07	-0.07	-7.92	-7.94	0.00	0.00	-0.51	-0.51
4	Electricity and gas supply	0.15	0.12	0.09	0.07	-23.54	-23.54	-21.04	-6.82	-0.05	-0.05	-0.04	-0.01
5	Water supply, sewerage, waste management and remediation activities	0.11	0.11	0.08	0.08	0.04	0.04	-0.14	3.01	0.00	0.00	0.00	0.01
6	Construction	6.07	5.93	4.06	3.96	-2.37	-2.37	-2.42	0.21	-0.25	-0.25	-0.24	0.02
7	Wholesale and retail trades, repair of motor vehicles and motorcycles	5.19	5.17	3.61	3.59	-0.48	-0.48	-5.90	-3.83	-0.04	-0.04	-0.56	-0.36
8	Transport and storage	5.49	3.33	2.66	1.76	-33.74	-33.74	-39.48	-23.07	-2.32	-2.32	-2.86	-1.67
9	Accommodation and food service activities	13.22	9.40	7.14	5.36	-24.97	-24.97	-33.10	-21.22	-4.62	-4.62	-6.58	-4.24
10	Information and communication	3.49	3.51	3.02	3.05	0.76	0.76	6.24	6.82	0.06	0.06	0.44	0.49
11	Financial and insurance services	2.61	2.29	1.75	1.56	-10.71	-10.71	-7.20	-0.04	-0.48	-0.48	-0.30	0.00

No	Industrial Origin	Current Prices		Constant Prices (2010)		Growth Rate (%)			Source of Growth (%)		
		Q1-2020	Q2-2020	Q1-2020	Q2-2020	O2-2020 to Q1-2020 (q-to-q)	O2-2020 to Q2-2019 (y-on-y)	C1-2020 to C1-2019 (c-to-c)	O2-2020 to Q1-2020 (q-to-q)	O2-2020 to Q2-2019 (y-on-y)	C1-2020 to C1-2020 (c-to-c)
12	Real estate activities	2.49	2.47	1.88	1.87	-0.59	1.83	2.42	-0.03	0.08	0.11
13	Business services	0.66	0.64	0.44	0.43	-2.82	-3.64	-1.41	-0.03	-0.04	-0.02
14	Public administration and defence; compulsory social security	3.17	3.20	2.23	2.23	0.12	-0.02	3.43	0.01	0.00	0.19
15	Education	3.17	3.25	2.15	2.19	1.96	-0.26	-0.26	0.11	-0.01	-0.01
16	Human health and social work activities	1.45	1.44	1.02	1.00	-1.32	2.88	4.55	-0.03	0.07	0.11
17	Other services activities	0.98	0.96	0.64	0.62	-2.75	-7.23	-5.05	-0.05	-0.12	-0.08
	Total	60.60	54.43	38.65	35.86	-7.22	-10.98	-6.13	-7.22	-10.98	-6.13

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