Chapter 2

Indonesia

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Chapter 2

Indonesia

Ibrahim Kholilul Rohman

2.1. Economic Overview

Indonesia experienced a growth contraction of –2.07% in 2020 (Indonesian Bureau of Statistics, 2021a). The sectors experiencing the strongest contractions were transport and warehousing by –15.04%, accommodation and food and drink by –10.22%, business services by –5.44%, other services by –4.10%, and retail and automotive repair by –3.72%. Some fields experienced growth, including health services and social activities by 11.60%; information and communication technology (ICT) by 10.58%; water and waste management and recycling by 4.94%; real estate by 2.32%; and agriculture, forestry, and fisheries by 1.75% (Table 2.1).

Spending contractions occurred in almost all components except government expenditure, which grew by 1.94%. The deepest contraction occurred in imports of goods and services at –14.71%, followed by exports of goods and services at –7.70%. Household consumption also decreased by –2.63%. The pandemic created much uncertainty, making people act cautiously and keep their assets. This led to an increase in government spending to reduce a deeper contraction of the economy (Table 2.2).

Table 2.1: Indonesia's Gross Domestic Product Growth by Sector and Expenditure, 2020

	Business Field	Quarter IV-2020 against Quarter III-2020 (*q-to-q*)	Quarter III-2020 against Quarter III-2019 (*y-on-y*)	Quarter IV-2020 against Quarter IV-2019 (*y-on-y*)	Growth Rate 2020	Source of Growth 2020
	(1)	(2)	(3)	(4)	(5)	(6)
A.	Agriculture, Forestry and Fisheries	(20.15)	2.16	2.59	1.75	0.22
B.	Mining and Excavation	1.65	(4.28)	(1.20)	(1.95)	(0.14)
C.	Processing Industry	(0.38)	(4.34)	(3.14)	(2.93)	(0.61)
D.	Electricity and Gas Supply	0.94	(2.44)	(5.01)	(2.34)	(0.02)
E.	Water Supply, Waste Management, Waste and Recycling	3.11	5.94	4.98	4.94	0.00
F.	Construction	3.48	(4.52)	(5.67)	(3.26)	(0.33)
G.	Wholesale and Retail Trade, Car and Motorcycle Repair	(0.87)	(5.05)	(3.64)	(3.72)	(0.49)
H.	Transport and Warehousing	5.08	(16.71)	(13.42)	(15.04)	(0.64)
I.	Provision of Accommodation and Food and Beverage	5.86	(11.81)	(8.88)	(10.22)	(0.31)
J.	Information and Communication	0.99	10.72	10.91	10.58	0.57
K.	Financial Services and Insurance	5.61	(0.95)	2.37	3.25	0.13
L.	Real Estate	0.07	1.96	1.25	2.32	0.07
M,N.	Business Services	2.66	(7.61)	(7.02)	(5.44)	(0.10)

O.	Government Administration, Defence, and Mandatory Social Security	8.95	1.82	(1.55)	(0.03)	0.00
P.	Education Services	7.83	2.41	1.36	2.63	0.08
Q.	Health Services and Social Activities	5.78	15.29	16.54	11.60	0.13
R,S,T,U.	Other Services	2.29	(5.55)	(4.84)	(4.10)	(0.08)
Gross Value Added on Base Price		(1.21)	(2.57)	(1.83)	(1.58)	(1.52)
Tax minus Subsidy on Products		21.37	(23.30)	(9.69)	(13.42)	(0.55)
Gross Domestic Product (GD)		(0.42)	(3.49)	(2.19)	(2.07)	(2.07)

() = negative, c-to-c = GDP at constant prices cumulative up to a quarter compared to the same cumulative period in the previous year, GDP = gross domestic product, q-to-q = GDP at constant prices in a quarter compared to the previous quarter, y-on-y = GDP at constant prices in a quarter compared to the same quarter in the previous year.
Source: Indonesian Bureau of Statistics (2021a).

Table 2.2: Indonesia's Gross Domestic Product by Expenditure, 2020

	Component	Quarter IV-2020 against Quarter III-2020 (*q-to-q*)	Quarter III-2020 against Quarter III-2019 (*y-on-y*)	Quarter IV-2020 against Quarter IV-2019 (*y-on-y*)	Growth Rate 2020	Source of Growth 2020
	(1)	(2)	(3)	(4)	(5)	(6)
1.	Household Consumption Expenditure	0.49	(4.05)	(3.61)	(2.63)	(1.43)
2.	NPOSH Consumption Expenditure	0.22	(1.97)	(2.14)	(4.29)	(0.05)
3.	Government Consumption Expenditure	27.15	9.76	1.76	1.94	0.15
4.	Gross Fixed Capital Formation	4.19	(6.48)	(6.15)	(4.95)	(1.63)
5.	Inventory Change	-	-	-	-	-
6.	Export of Goods and Services	2.41	(11.66)	(7.21)	(7.70)	(1.60)
7.	Minus Import of Goods and Services	16.28	(23.00)	(13.52)	(14.71)	(2.74)
	Gross Domestic Product (GDP)	(0.42)	(3.49)	(2.19)	(2.07)	(2.07)

() = negative, c-to-c = GDP at constant prices cumulative up to a quarter compared to the same cumulative period in the previous year, GDP = gross domestic product, NPOSH = non-profit organisation serving household, q-to-q = GDP at constant prices in a quarter compared to the previous quarter, y-on-y = GDP at constant prices in a quarter compared to the same quarter in the previous year.
Source: Indonesian Bureau of Statistics (2021a).

Regarding 2021, Indonesia's economy shows a recovery from 2020. January to June 2021 – compared to January to June 2020 – experienced growth of 3.10% across all fields. Significant growth was seen by the ICT sector at 7.78%, followed by health services and social activities at 7.38%; water, waste management, and recycling at 5.62%; accommodation and food and drink at 5.35%; and electricity and gas by 5.23% (Table 2.3).

Growth also occurred in all components of expenditure. The highest growth occurred in exports of goods and services by 18.51%, followed by imports of goods and services by 17.30%. Household consumption also grew by 1.72%. The first 6 months of 2021 do show an economic recovery from 2020, but the Delta variant of the coronavirus has become a threat to the Indonesian economy, which will be reflected in the third quarter of 2021 (Table 2.4).

Table 2.3: Indonesia's Gross Domestic Product Growth by Sector and Expenditure, 2021

	Business Field	Quarter I-2021 against Quarter IV-2020 (*q-to-q*)	Quarter II-2021 against Quarter I-2021 *(q-on-q)*	Quarter I-2021 against Quarter I-2020 (*y-on-y*)	Quarter II-2021 against Quarter II-2020 (*y-on-y*)	Semester I-2021 against Semester I-2020 (*c-to-c*)	Source of Growth Quarter II-2021 (*y-on-y*)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
A.	Agriculture, Forestry, and Fisheries	10.22	12.93	3.33	0.38	1.75	0.06
B.	Mining and Excavation	(1.56)	3.37	(2.02)	5.22	1.53	0.39
C.	Processing Industry	0.61	1.07	(1.38)	6.58	2.46	1.35
D.	Electricity and Gas Supply	0.98	(1.17)	1.68	9.09	5.23	0.09
E.	Water Supply, Waste Management, Waste and Recycling	(0.59)	1.66	5.46	5.78	5.62	0.01
F.	Construction	(2.10)	(2.51)	(0.79)	4.42	1.72	0.42
G.	Wholesale and Retail Trade, Car, and Motorcycle Repair	1.07	3.36	(1.23)	9.44	3.92	1.21
H.	Transport and Warehousing	(6.05)	1.96	(13.12)	25.10	2.72	0.77
I.	Provision of Accommodation and Food and Beverage	(1.80)	1.91	(7.26)	21.58	5.35	0.54
J.	Information and Communication	0.88	1.64	8.71	6.87	7.78	0.43
K.	Financial Services and Insurance	(0.17)	0.17	(2.97)	8.35	2.38	0.35
L.	Real Estate	0.18	1.59	0.94	2.82	1.88	0.09
M,N.	Business Services	(1.31)	0.56	(6.10)	9.94	1.31	0.17
O.	Government Administration, Defence, and Mandatory Social Security	(9.96)	10.04	(3.05)	9.49	3.14	0.32
P.	Education Services	(13.14)	6.86	(1.71)	5.72	1.99	0.18
Q.	Health Services and Social Activities	(10.37)	3.56	3.32	11.62	7.38	0.14
R,S,T,U.	Other Services	(1.53)	0.21	(5.16)	11.97	2.71	0.21
Gross Value Added on Base Price		(0.18)	3.25	(0.99)	6.98	2.90	6.73
Tax minus Subsidy on Products		(17.68)	4.93	7.80	9.56	8.70	0.34
Gross Domestic Product (GD)		(0.92)	3.31	(0.71)	7.07	3.10	7.07

() = negative, c-to-c = GDP at constant prices cumulative up to a quarter compared to the same cumulative period in the previous year, GDP = gross domestic product, q-to-q = GDP at constant prices in a quarter compared to the previous quarter, y-on-y = GDP at constant prices in a quarter compared to the same quarter in the previous year.

Source: Indonesian Bureau of Statistics (2021a).

Table 2.4: Indonesia's Gross Domestic Product by Expenditure, 2021

Component	Quarter I-2021 against Quarter IV-2020 (*q-to-q*)	Quarter II-2021 against Quarter I-2021 *(q-on-q)*	Quarter I-2021 against Quarter I-2020 (*y-on-y*)	Quarter II-2021 against Quarter II-2020 (*y-on-y*)	Semester I-2021 against Semester I-2020 (*c-to-c*)	Source of Growth Quarter II-2021 (*y-on-y*)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Household Consumption Expenditure	(0.58)	1.27	(2.22)	5.93	1.72	3.17
2. NPOSH Consumption Expenditure	(4.12)	7.50	(4.03)	4.12	0.03	0.05
3. Government Consumption Expenditure	(43.69)	29.07	2.34	8.06	5.49	0.61
4. Gross Fixed Capital Formation	(2.21)	(2.69)	(0.23)	7.54	3.46	2.30
5. Inventory Change	–	–	–		–	–
6. Export of Goods and Services	8.12	6.58	7.03	31.78	18.51	5.81
7. Minus Import of Goods and Services	6.66	5.81	5.46	31.22	17.30	4.83
Gross Domestic Product (GDP)	(0.92)	3.31	(0.71)	7.07	3.10	7.07

() = negative, c-to-c = GDP at constant prices cumulative up to a quarter compared to the same cumulative period in the previous year, GDP = gross domestic product, NPOSH = non-profit organisation serving household, q-to-q = GDP at constant prices in a quarter compared to the previous quarter, y-on-y = GDP at constant prices in a quarter compared to the same quarter in the previous year.
Source: Indonesian Bureau of Statistics (2021a).

Indonesia's total exports from January to July 2021 – compared to January to July 2020 – saw an increase of 33.94%, thanks mostly to the increased exports in both oil and gas (48.33%) and non-oil and gas (33.17%). The manufacturing sector increased by 31.36% in 2021 compared to 2020, due to increased palm oil exports. Exports of agricultural, forestry, and fishery products increased by 8.72% due to more medicinal plant, aromatic, and spice exports. Exports of mining and other products rose 49.13%, especially coal (Table 2.5).

Table 2.5: Indonesia's Exports, 2020 and 2021

	FOB Value ($ million)					Change (%)			
Description	**Jul 2020**	**Jan–Jul 2020**	**Jun 2021***	**Jul 2021***	**Jan–Jul 2021**	**Jul 2021 against Jul 2020** *(y-on-y)*	**Jul 2021 against Jun 2021** *(m-to-m)*	**Jan–Jul 2021 against Jan–Jul 2020** *(c-to-c)*	**Role in Total Exports Jan–Jul 2021** *(%)*
Total Exports	13,689.9	90,019.0	18,542.4	17,703.2	120,573.6	29.3	(4.5)	33.9	100.0
Oil and Gas	660.4	4,588.6	1,232.1	991.2	6,806.4	50.1	(19.6)	48.3	5.7
Non-Oil and Gas	13,029.5	85,430.4	17,310.3	16,712.0	113,767.2	28.3	(3.5)	33.2	94.4
Agriculture, Forestry, and Fisheries	349.6	2,060.2	326.1	286.7	2,239.8	(18.0)	(12.1)	8.7	1.9
Processing Industry	11,287.6	72,034.4	14,072.4	13,561.5	94,622.0	20.2	·3.63	31.4	78.5
Mining and Others	1,392.3	11,335.8	2,911.8	2,863.8	16,905.4	105.7	·1.65	49.1	14.0

() = negative, * = temporary, FOB = free onboard (i.e. the buyer is the responsible entity for the shipping and logistic costs).
Source: Indonesian Bureau of Statistics (2021b).

Table 2.6 shows that China remained the largest export destination country, with a value of $53.8 billion (23%) in 2021. Other main export destination regions are AMS with a value of $48 billion (21%), the US with a value of $31.9 billion (14%), and the EU with a value of $23.1 billion (10%). The main commodities exported to China during this period were iron/steel, coal, and palm oil.

Table 2.6: Export Destination Countries from Indonesia, FOB Value ($ million)

Destination Country	2019	2020	2021
Asia			
ASEAN	**41,464.5**	**36,420.2**	**48,021.6**
Thailand	6,218.4	5,110.3	7,088.0
Singapore	12,916.7	10,661.9	11,635.8
Philippines	6,770.1	5,900.7	8,604.3
Malaysia	8,801.8	8,098.8	11,971.0
Viet Nam	5,153.4	4,941.4	6,850.1
Other ASEAN	1,604.1	1,707.3	1,872.3
Other Asia			
Japan	16,003.3	13,664.7	17,872.7
Hong Kong	2,501.7	2,034.9	2,063.5
Republic of Korea	7,234.4	6,507.6	8,981.9
Taiwan	4,034.8	4,097.4	6,960.2
China	**27,961.9**	**31,781.8**	**53,765.5**
Others	21,908.3	20,001.1	27,588.9
Africa	**4,603.4**	**4,614.7**	**7,065.5**

Australia and Oceania	**3,065.9**	**3,290.2**	**4,285.0**
United States	**22,034.7**	**22,644.2**	**31,869.7**
European Union	**16,870.1**	**18,134.8**	**23,135.1**
Total	**167,683.0**	**163,191.8**	**231,609.5**

ASEAN = Association of Southeast Asian Nations, FOB = free onboard (i.e. the buyer is the responsible entity for the shipping and logistic costs).
Source: Indonesian Bureau of Statistics, Nilai Ekspor Menurut Negara Tujuan Utama https://www.bps.go.id/statictable/2014/09/08/1010/nilai-ekspor-menurut-negara-tujuan-utama-nilai-fob-juta-us-2000-2021.html (accessed 30 March 2023).

Indonesia's total imports from January to July 2021 – compared to January to July 2020 – saw an increase of $24.79 billion (30.46%) due to an increase in oil and gas imports by $4.82 billion (56.74%) and non-oil and gas imports by $19.97 billion (27.40%). The increase in the value of oil and gas imports was triggered by a surge in imports of crude oil of $1.73 billion (77.44%), oil yields of $2.54 billion (53.75%), and gas of $0.55 billion (35.86%) (Table 2.7).

Table 2.7: Indonesia's Imports, 2020 and 2021

	CIF Value ($ million)					Change (%)			
Description	**Jul 2020**	**Jun 2021**	**Jul 2021***	**Jan–Jul 2020**	**Jan–Jul 2021***	**Jul 2021 against Jul 2020 (y-on-y)**	**Jul 2021 against Jun 2021 (m-to-m)**	**Jan–Jul 2021 against Jan–Jul 2020 (c-to-c)**	**Role in Total Imports Jan–Jul 2021 (%)**
Total Imports	10,464.3	17,218.4	15,114.3	81,367.5	106,154.3	44.4	(12.2)	30.5	100.0
Oil and Gas	958.2	2,297.8	1,786.0	8,488.4	13,304.4	86.4	(22.3)	56.7	12.5
- Crude Oil	248.6	971.9	274.5	2,228.9	3,955.0	10.4	(71.8)	77.4	3.7
- Oil Yield	543.8	1,098.7	1,082.6	4,725.2	7,265.0	99.1	(1.5)	53.8	6.8
- Gas	165.8	227.2	428.9	1,534.3	2,084.4	158.7	88.8	35.9	1,96
Non-Oil and Gas	9,506.1	14,920.6	13,328.3	72,879.1	92,849.9	40.2	(10.7)	27.4	87.5

() = negative; * = temporary; CIF = cost, insurance, and freight (i.e. the price of a good delivered at the frontier of the importing country).
Source: Indonesian Bureau of Statistics (2021b).

China has been the main origin country for Indonesia's imports as shown in Table 2.8, with a value of $56.2 billion in 2021 – 29% of total Indonesia imports. Other major import source regions are AMS at $39.9 billion (20.0% of total imports), the US at $18.98 billion (9.7%), and the EU at $16.3 billion (8.2%).

Table 2.8: Indonesia's Imports by Country, 2019–2021, CIF Value ($ million)

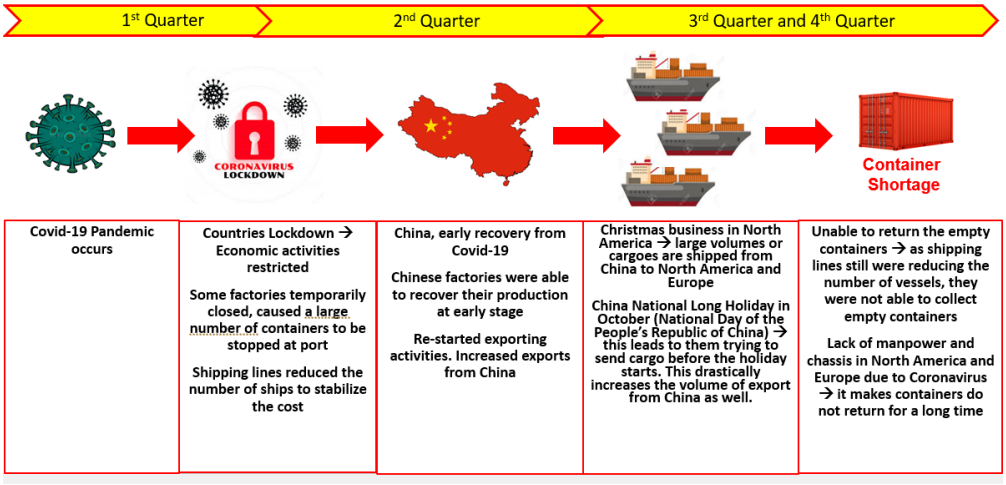
Country of Origin	2019	2020	2021
Asia	**128,999.0**	**103,785.0**	**144,238.6**
ASEAN	**39,791.3**	**29,832.8**	**39,951.4**
Thailand	9,469.1	6,483.8	9,146.5
Singapore	17,589.8	12,341.2	15,451.7
Philippines	821.9	592.0	1,273.3
Other ASEAN	8,062.30	7,285.20	9,866.90
Viet Nam	3,848.2	3,130.6	4,213.0
Other Asia			
Japan	15,661.8	10,672.1	14,644.3
China	**44,930.6**	**39,634.7**	**56,227.2**
Republic of Korea	8,421.3	6,849.4	9,427.2
Others	20,194.0	16,796.0	23,988.5
Africa	**4,086.1**	**2,566.0**	**6,301.9**
Australia and Oceania	**6,487.8**	**5,559.2**	**10,408.8**
United States	**15,714.2**	**15,358.5**	**18,981.8**
European Union	**15,988.6**	**14,300.1**	**16,258.9**
Total	**171,275.7**	**141,568.8**	**196,190.0**

ASEAN = Association of Southeast Asian Nations, CIF = cost, insurance, and freight (i.e. the price of a good delivered at the frontier of the importing country).
Source: Indonesian Bureau of Statistics, Nilai Impor Menurut Negara Asal Utama, https://www.bps.go.id/statictable/2014/09/08/1036/nilai-impor-menurut-negara-asal-utama-nilai-cif-juta-us-2000-2021.html (accessed 30 March 2023).

2.2. Containerised Cargo

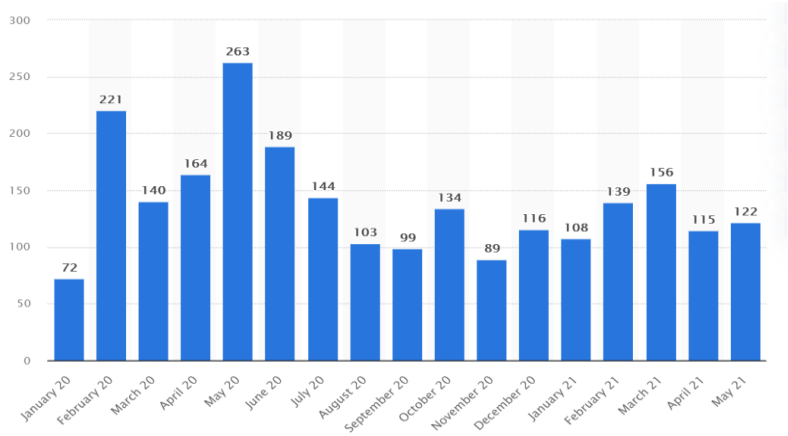
As the container shipping industry entered 2020, disruptive effects were expected from the new International Maritime Organization regulation that mandated a maximum sulphur content of 0.5% in marine fuels globally. The goal is to reduce the air pollution created from the shipping industry. However, as COVID-19 emerged in China, a series of dominoes began to topple for the shipping industry (Figure 2.1). The first was the failure to reopen Chinese manufacturing facilities following Chinese New Year closures as well as lockdowns in several countries that closed access to the entry and exit of goods. This created a massive shortfall in Chinese exports and, therefore, a drop in container demand. That sharp drop in demand then led container carriers to cancel numerous sailings. As of the end of February 2020, the number of blank sailings announced by carriers created a total demand shortfall of 1.7 million 20-tonne equivalent units (TEUs) (Sea-Intelligence, 2021). The number of blank and skipped sailings from January 2020 to February 2020 increased 206.94% (Figure 2.2).

Figure 2.1: Timeline of COVID-19 Pandemic Impacts on Containerised Cargo in 2020



Source: Authors.

Figure 2.2: Blank and Skipped Sailings, Worldwide, 2020–2021



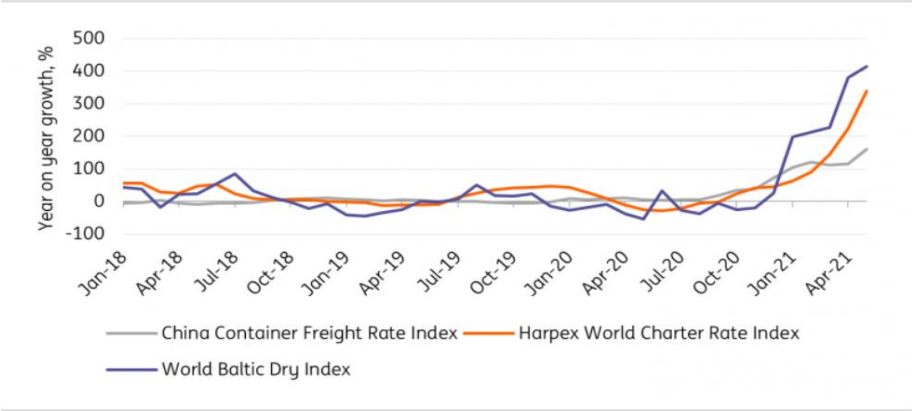
Source: Statista (2022c).

The new blank sailings led to a raft of blank sailings for export cargo to Asia from 3 to 10 weeks, depending on transit times and the timing of the blank sailings. Blank sailings caused an increase in the container rollover ratio, which is the percentage of cargo at the port that should be retransmitted via transhipment. For example, the main maritime trade hubs in Asia – Busan, Hong Kong, and Singapore – recorded a rollover ratio of 30% in August 2020, a sharp increase from the normal ratio of 15%–20% (Lloyd's List, 2020).

The pre-Chinese New Year peak, when cargo was being delivered, resulted in a substantial number of empty containers building up in Europe and North America. With the sudden additional shortfall incapacity due to the blank sailings, carriers became hard-pressed to repatriate empty containers in combination with the actual export cargo to Asia; this caused shortages of containers in some places, especially Asia. As economic recovery began to occur across the globe, the demand for containers increased, which was not balanced from the supply side due to shortage of containers. The unpreparedness of ports and carriers thus resulted in port congestion and an extreme increase in freight rates. Baltic Dry Index data – which show average prices paid for the transport of dry bulk

materials that can reflect supply and demand for important materials used in manufacturing – increased by more than 100% compared to the previous year.4 The China Container Freight Rate Index increased by around 100% compared to the previous year as well (Figure 2.3).

Figure 2.3: Global Shipping Costs, 2018–2021 (%)

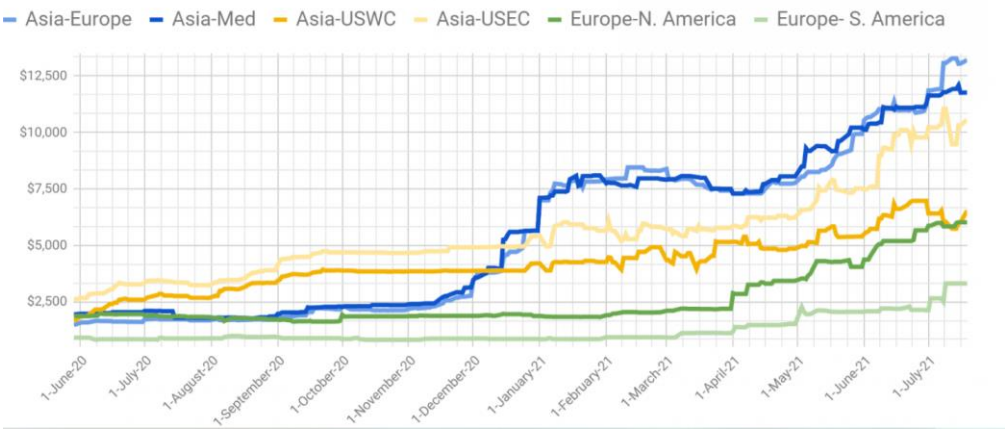


Sources: Freightos Data, Freightos Baltic Index (FBX): Global Container Freight Index, https://fbx.freightos.com/ (accessed 5 August 2022)

The year 2021 still presented challenges and remained full of uncertainty. To April 2021, the Baltic Dry Index increased by around 400% compared to the previous year. China's Container Freight Rate Index also rose by around 300% compared to the previous year. Until July 2021, the Asia–Europe, Asia–Mediterranean, and Asia–US West Coast routes reached more than $10,000 per 40-foot equivalent unit (FEU), which was less than $7,500 per FEU in early 2021 (Figure 2.4).

[4] Freightos Data, Freightos Baltic Index (FBX): Global Container Freight Index, https://fbx.freightos.com/ (accessed 5 August 2022).

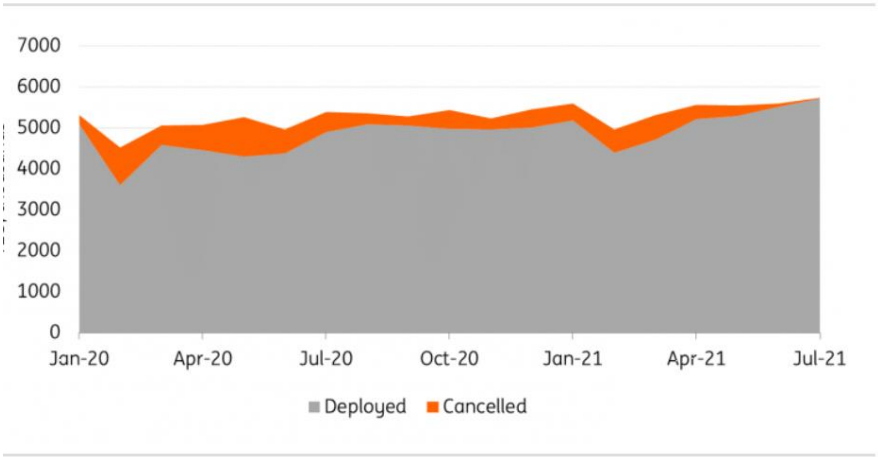
Figure 2.4: Ocean Container Spot Rates, 2020–2021 ($)



USEC = East Coast of the United States, USWC = West Coast of the United States.
Source: Freightos Data, Freightos Baltic Index (FBX): Global Container Freight Index, https://fbx.freightos.com/ (accessed 5 August 2022).

Globally, 2021 capacity on major shipping routes recovered to levels before the 2020 lockdowns, although blank sailings continued to cut 10% of scheduled capacity through the first quarter. There are signs of improvement in the next quarter, which may average 4% (Figure 2.5).

Figure 2.5: Deployed and Cancelled Shipping Capacity ('000 TEUs)

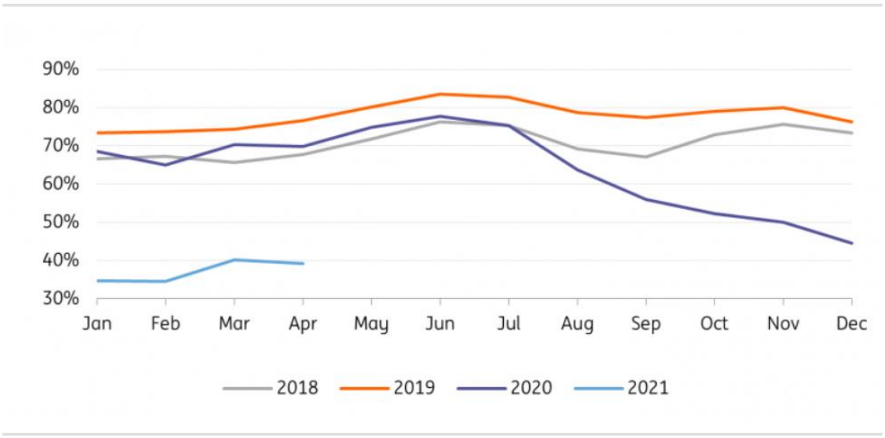


TEU = 20-foot equivalent unit.
Source: eeSea (2021).

In 2021, there were also lower rates of vessels on schedule and rising delays for vessels. The average share of ships arriving on time in 2021 was around 40%, the lowest value within a 10-year period (Figure 2.6). This occurred because of the high uncertainty from the Delta variant, such as the sudden closing of China's Yantian International Container Port, which is the world's fourth-largest container port, in June. Although operations have resumed, congestion and the need for measures to stop the spread of COVID-19 mean delays continue to mount. Although China and other major trading

countries are making progress with vaccination programmes, creating immunity will take time; consequently, interruptions will remain a risk over the coming months.

Figure 2.6: Share of Vessels Arriving on Time, 2018–2021 (%)

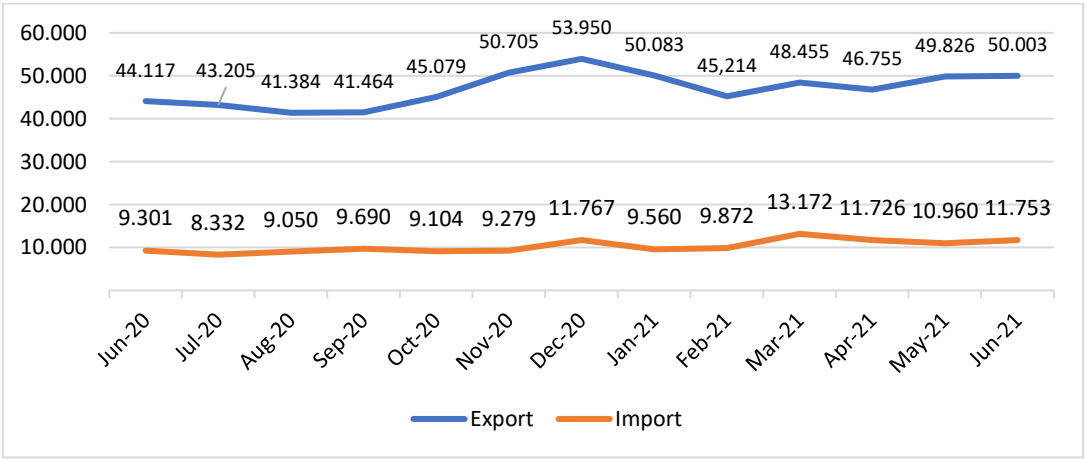


Source: Sea-Intelligence (2021).

2.3. Domestic Trade

Overall, Indonesia's trade balance for the period from January to July 2021 recorded a $14.42 billion surplus, well above the $8.65 billion surplus recorded in the same period of 2020. In terms of trade volume, Indonesia's exports from January to July 2021 tended to be stable at 45 million to 50 million tonnes, while imports tend to be stable at around 10 million tonnes (Figure 2.7).

Figure 2.7: Indonesia's Export and Import Volume, 2020–2021 ('000 tonnes)

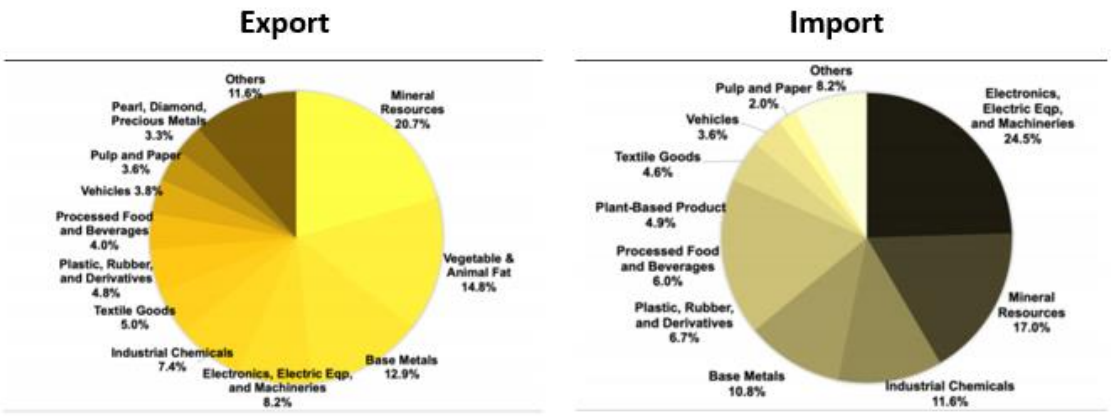


Source: Indonesian Bureau of Statistics (2021c).

Exports are still dominated by raw commodities, consisting of mineral resources, vegetable fat, and precious metal. The significant jump in commodity prices due to the continuation of demand recovery from the pandemic has contributed to a more significant share of Indonesia's commodity exports. There was a two-fold increase from March 2020 to August 2021, recording the highest level in the last decade. Coal commodity prices increased from $86 per metric tonne in January 2021 to $160 per metric tonne in August 2021. Copper prices also grew rapidly from $3,900 per pound in January 2021 to $4,300 per pound in August 2021. Coal exports fell from 38 million tonnes in January 2021 to 37 million tonnes in May 2021, but foreign exchange contributions increased from $1.8 billion to $2.2 billion.[5] The increase in coal prices is beneficial for Indonesian exports considering that coal is one of Indonesia's largest export commodities. However, this makes Indonesian exports dependent on commodity prices, which can easily decline.

Imports of capital goods remain the main contributor to total imports. Capital goods, which consist of machinery and electronic products, cover around 25% of total imports (Figure 2.8). Industrial chemical products also remain the third-most imported because of the high demand for medical supplies and equipment during the pandemic. The share of industrial chemical imports is expected to increase soon, as Indonesia has been battling the resurgence of COVID-19 cases.

Figure 2.8: Indonesia's Export–Import Profile, May-June 2021



Source: LPEM FEB UI (2021).

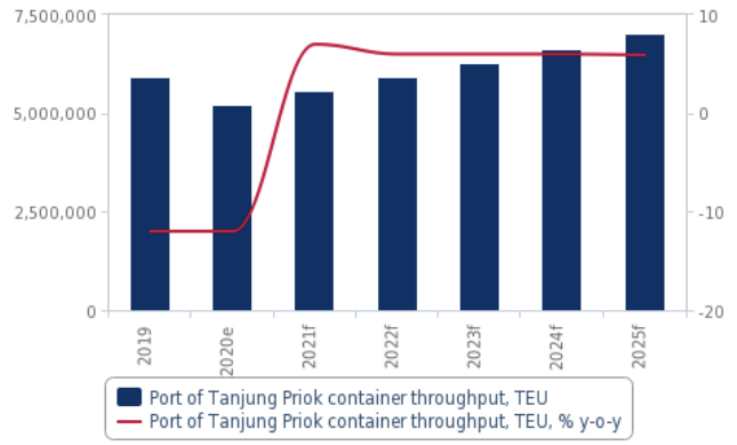
In 2020, shipping volumes at Indonesia's main ports contracted in line with a slowdown in the country's economic activity. The pandemic caused slower economic growth and thus imported demand for bulk and containerised products. The shutdown of many major construction projects – along with social-distancing measures – also undermined imports of construction materials and capital equipment.

Indonesia is predicted to experience an increase in container throughput growth by 7% in 2021 to reach 5.6 million TEUs, while tonnage throughput will grow by 3% to 23.0 million tonnes in the medium

[5] S&P Dow Jones Indices, Dow Jones Commodity Index, https://www.spglobal.com/spdji/en/indices/commodities/dow-jones-commodity-index/#overview (accessed 10 January 2022).

term (i.e. 2021–2025), along with a general rebound in global and domestic and economic growth. The largest port in Indonesia, Tanjung Priok, is set to register average annual tonnage and container throughput growth of 2.8% and 6.2%, respectively, over 2021–2025 (Figure 2.9). However, this will largely depend on how the pandemic is controlled, vaccination rates, and the economic conditions of other countries.

Figure 2.9: Port of Tanjung Priok Container Throughput (TEU)



TEU = 20-foot equivalent unit.
Source: Fitch Solutions (2021).

In the long run, Tanjung Priok will see throughput and box volume growth of 3.0% and 6.0% year on year, respectively, over 2021–2030. The major problem facing Indonesia's container sector is the comparatively underdeveloped level of its port infrastructure in the short term. According to the *Global Competitiveness Index Report 2019*, the country's ports ranked 36th globally in 2019 (Schwab, 2019). Although the maritime sector is of immense strategic and economic importance to the archipelago nation, Indonesia's ports have suffered from perennial underinvestment and are highly inefficient.

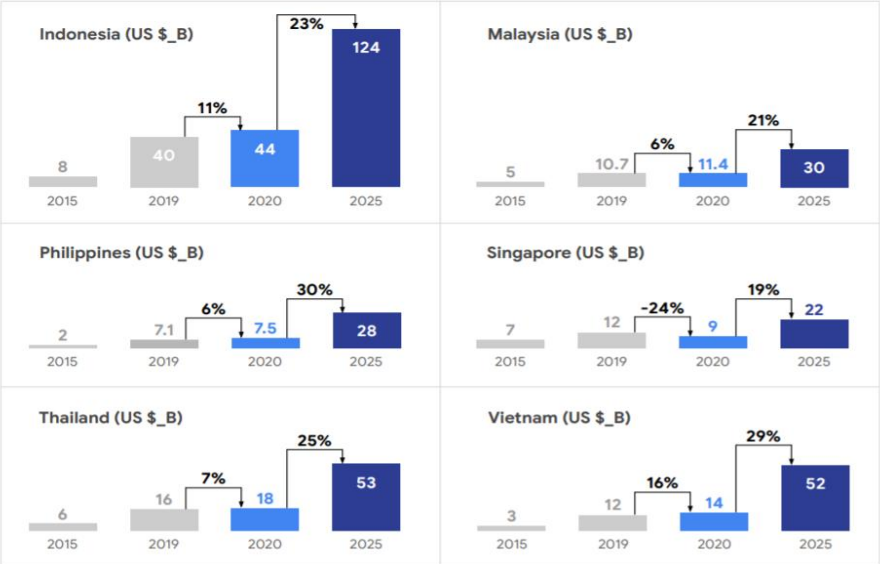
Thus, the Joko Widodo Administration has emphasised improving port efficiency and competitiveness as part of its initiative to transform the country into a global maritime axis. To achieve this, the government will require about $55.4 billion to develop 24 commercial seaports and more than 1,000 domestic ports and to procure vessels for its marine highway programme (GOI, 2015). The administration is also pursuing a network of sea toll roads – a domestic maritime corridor that aims to improve logistics flows and to reduce the costs of transporting goods amongst Indonesia's many islands, especially to and from the eastern provinces of Maluku, North Maluku, Papua, and West Papua. The network will be centred on six major seaports near five cities: Batam, Belawan near Medan, Makassar, Sorong, Tanjung Perak in Surabaya, and Tanjung Priok in Jakarta (GOI, 2015).

Indonesia began a $3 billion project in August 2018 to develop Patimban Deep Sea Port in Subang, West Java (Reuters, 2020). Penta-Ocean Construction, PT Pembangunan Perumahan (Persero) Tbk, PT Wijaya Karya (Persero) Tbk, Rinkai Nissan Construction, and TOA Corporation are implementing the three-phase scheme, which is expected to reduce congestion at Tanjung Priok in Jakarta. The project will conclude in 2027.

2.4. E-Commerce

According to Google, Temasek, and Bain and Company (2020), all countries in South-East Asia experienced an increase in gross merchandise value (GMV) from e-commerce; Indonesia experienced the most significant increase, reaching $44 billion in 2020 and $124 billion in 2025 (Figure 2.10).

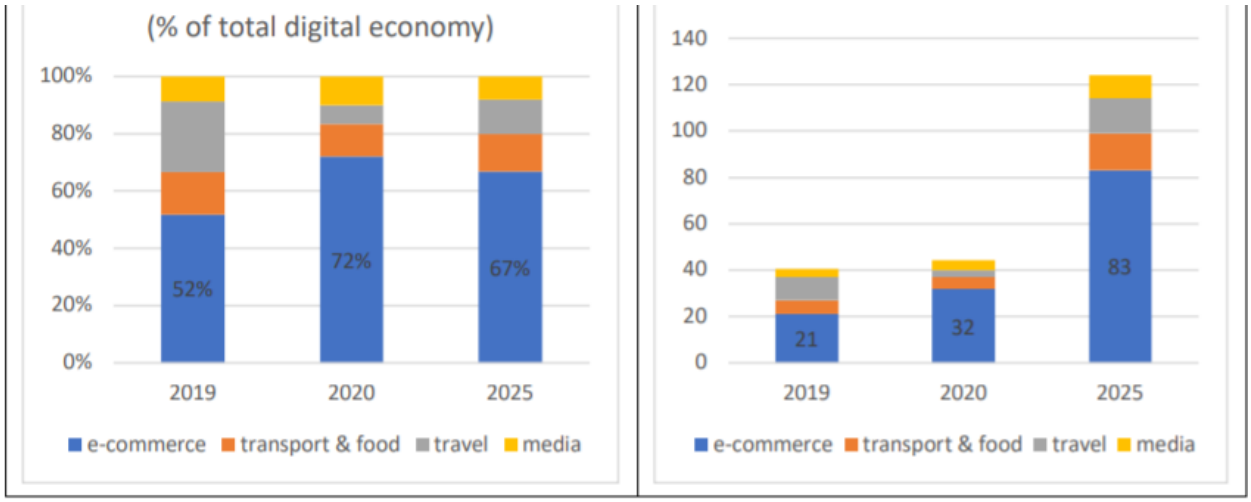
Figure 2.10: South-East Asia Internet Economy Gross Merchandise Value ($ billion)



Source: Google, Temasek, and Bain and Company (2020).

Looking at the specifics of the digital economy, e-commerce plays the biggest role. In 2019, e-commerce accounted for 52% of the contribution to Indonesia's digital economy. During the pandemic, e-commerce experienced a significant increase to 72% in 2020, projected to be 67% in 2025. E-commerce transactions in Indonesia are expected to increase by almost 160% in the next 5 years, with GMV projected at $83 billion in 2025, up from $32 billion in 2020. It can thus be concluded that e-commerce will continue to hold the largest contribution to Indonesia's digital economy (Figure 2.11).

Figure 2.11: Gross Merchandise Value of the Digital Economy in Indonesia

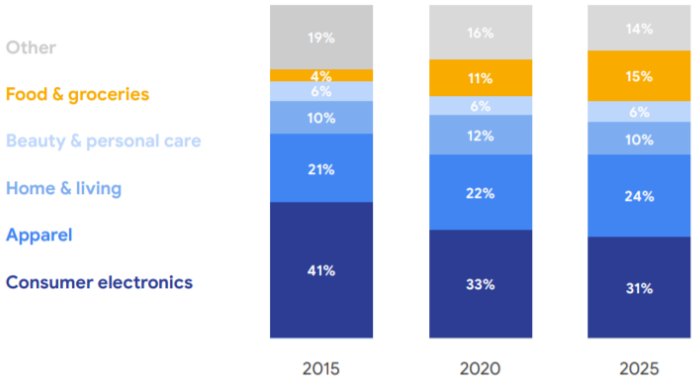


Source: Google, Temasek, and Bain and Company (2020).

Several factors have contributed to the rapid growth of the e-commerce industry in Indonesia. Rising smartphone and internet penetration and more middle-class consumers – combined with a young, tech-savvy population – are amongst the key determinants for this growth. About 213.09 million internet users were in Indonesia in 2021 (Statista, 2022a). Indonesia's number of internet users increased by 27 million (16%) between 2020 and 2021, and internet penetration in Indonesia stood at 70% in July 2021 (Statista, 2021).

With regard to the types of goods purchased through e-commerce, before the pandemic, people tended to be specific about buying goods online, with most purchasing consumer electronics (41%) and apparel (21%) (Google, Temasek, Bain and Company, 2020). Entering the pandemic in 2020, goods purchased through e-commerce began to vary, including food and groceries (11%) and home goods (12%) (Google, Temasek, Bain and Company, 2020). It is predicted that the purchase of goods through e-commerce will become more diverse due to people's newly created behaviour of shopping online in the future (Figure 2.12).

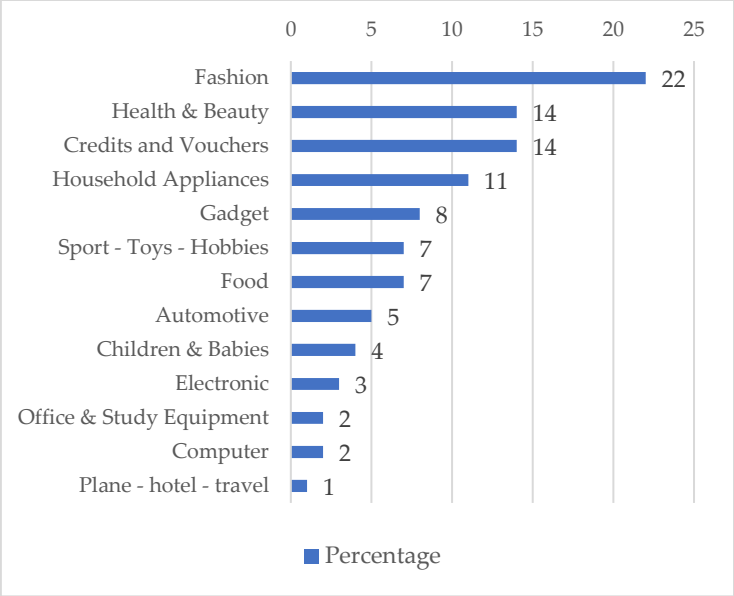
Figure 2.12: E-Commerce Gross Merchandise Value, Indonesia (%)



Source: Google, Temasek, Bain and Company (2020).

The largest proportion of goods purchase online in Indonesia is clothing (22%), while the second highest is health and beauty items (14%), followed by phone credit and vouchers (14%) (Katadata Insight Center, 2020). Thus, the most goods bought by Indonesians online are for daily life (Figure 2.13). This is in line with Maslow's hierarchy of needs theory, which reflects how the pandemic is returning consumers' behaviour to a focus on basic needs – physiological needs (i.e. food, drink, clothing, and shelter) and safety needs (i.e. health, insurance, and security) (Figure 2.14).

Figure 2.13: Product Transactions in E-Commerce, Indonesia (%)



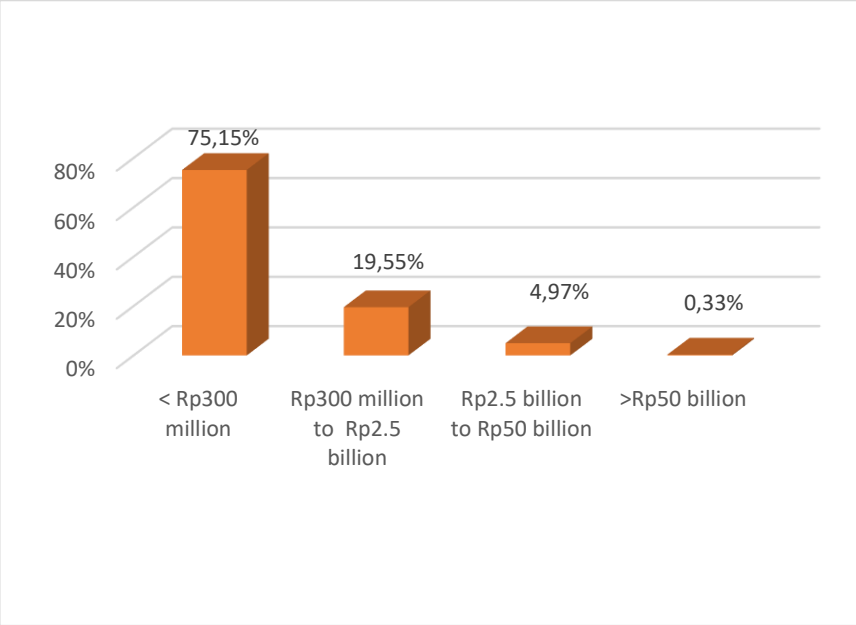
Source: Katadata Insight Center (2020).

Figure 2.14: Maslow's Hierarchy of Needs

Source: McLeod (2007).

Vendors in Indonesian e-commerce are dominated by micro and SMEs. In 2020, 75.15% of e-commerce sellers in Indonesia earned below Rp300 million, and 19.55% earned Rp300 million to Rp2.5 billion. Those who earned more than Rp2.5 billion constituted only 5.3%. Therefore, it can be concluded that Indonesian e-commerce is dominated and highly dependent on micro and SMEs (Figure 2.15).

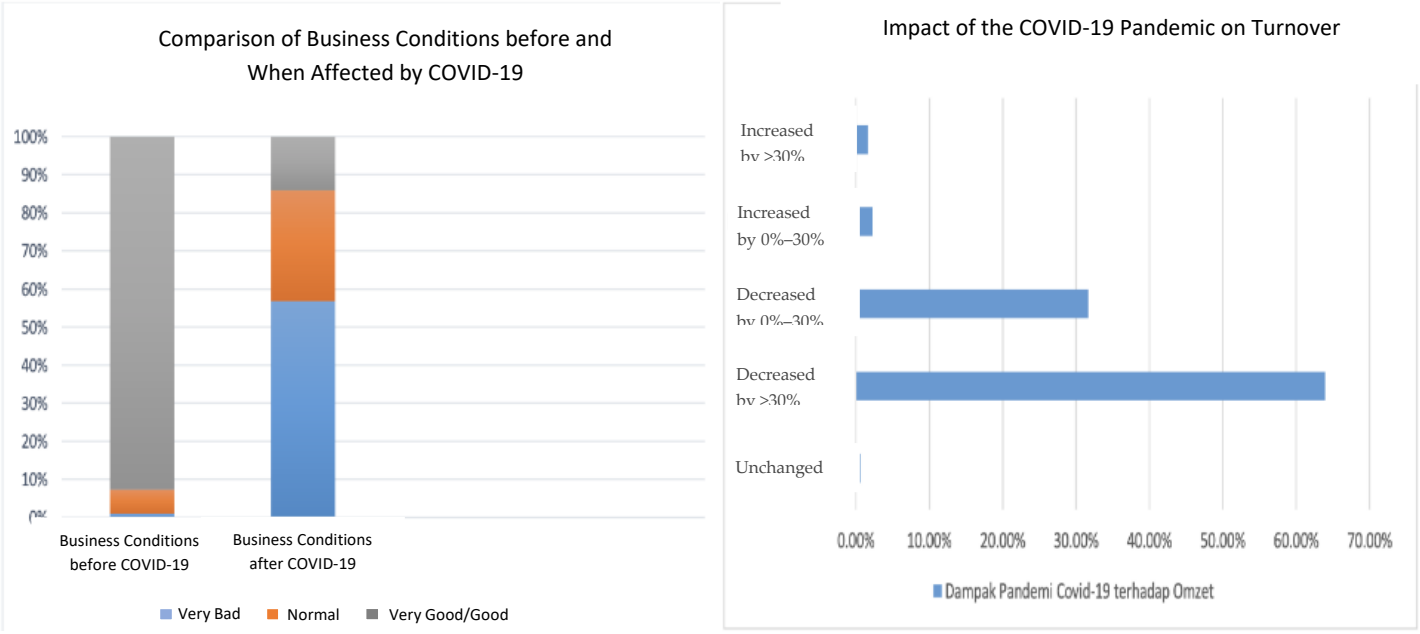
Figure 2.15: E-Commerce Enterprises by Total Revenue Value, Indonesia



Source: Indonesian Bureau of Statistics (2020).

The pandemic has had significant impacts on micro and SMEs in Indonesia, adversely impacting more than 50% of them. More than 60% of micro and SMEs experienced a decline in revenue by more than 30%, and another 30% experienced a decrease in income between 0% and 30% (Figure 2.16).

Figure 2.16: COVID-19 Impacts on Micro, Small, and Medium-Sized Enterprises in Indonesia

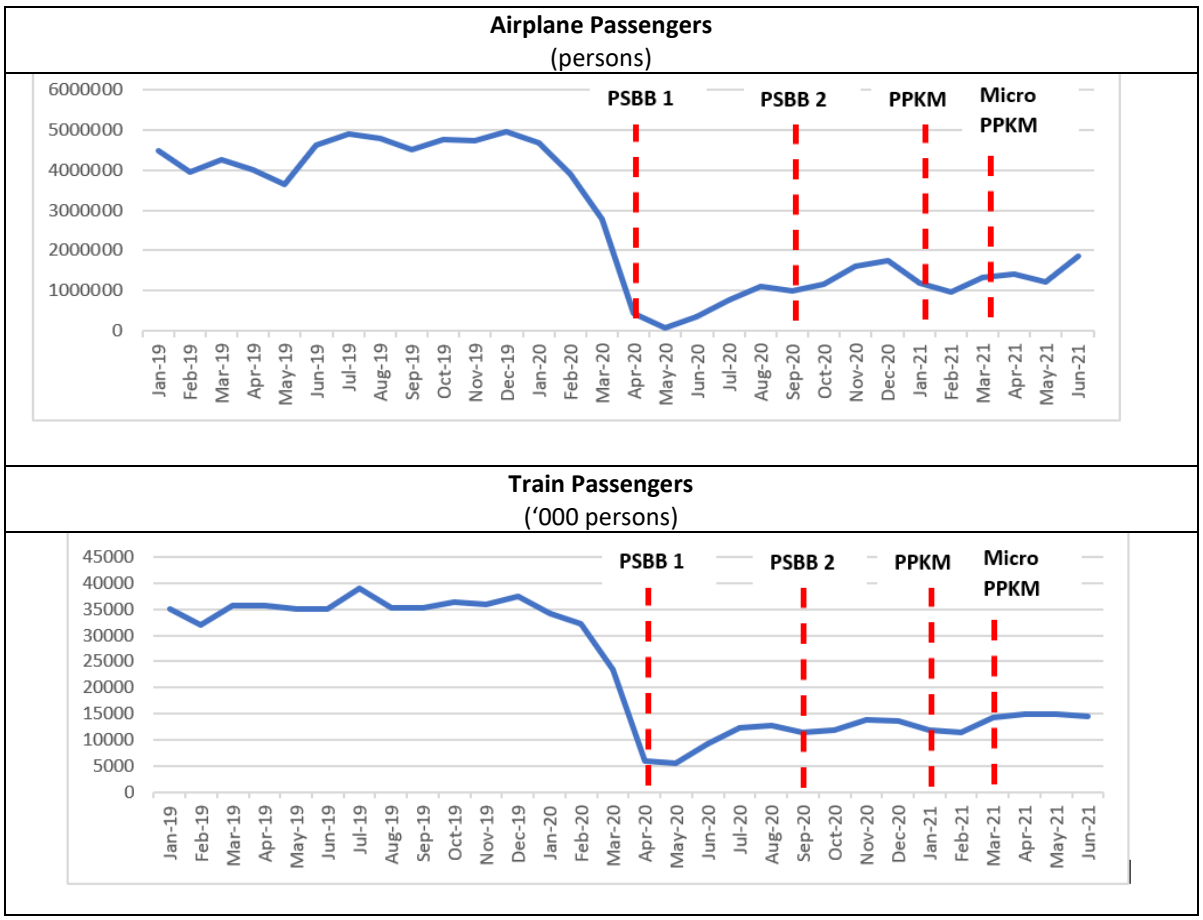


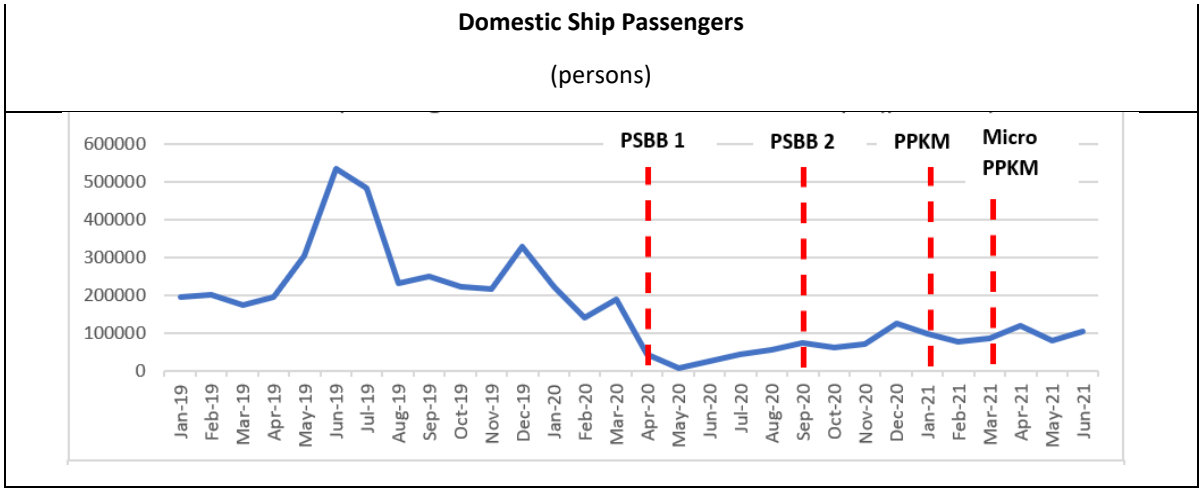
Source: Katadata Insight Center (2020).

2.5. Mobility of People

The pandemic has resulted in a drastic reduction in people's movement by land, sea, and air. People's movement via land decreased by some 85% from the *Pembatasan Sosial Berskala Besar* (PSBB, movement restriction) when it was announced in April 2020. People's movement by sea decreased by 70%, while that by air decreased by 98% (Figure 2.17). People's mobility increased after the first PSBB was lifted but did not return to its pre-pandemic levels due to the new COVID-19 variants.

Figure 2.17: Movement of People by Land, Sea, and Air Transport in Indonesia



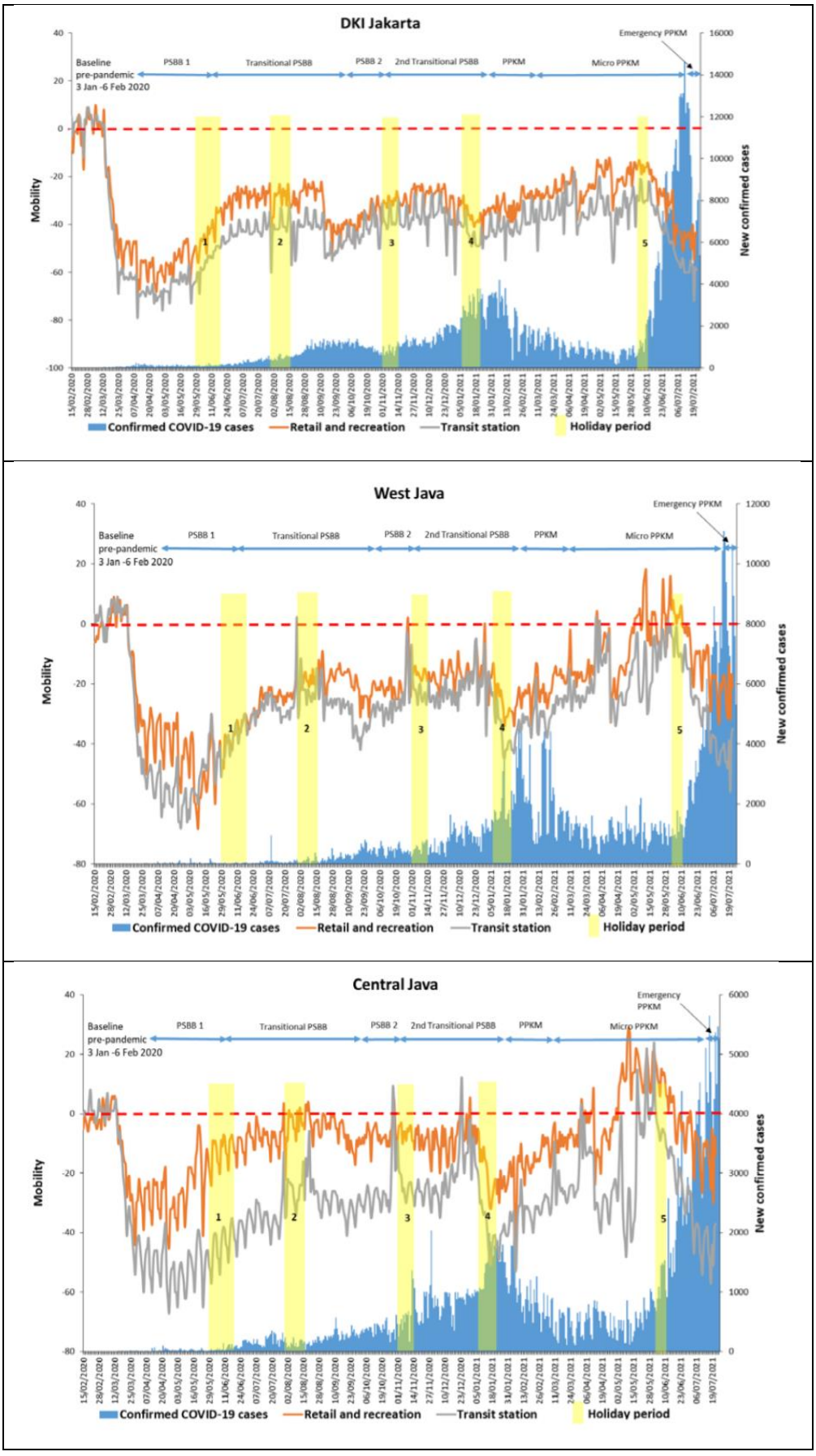


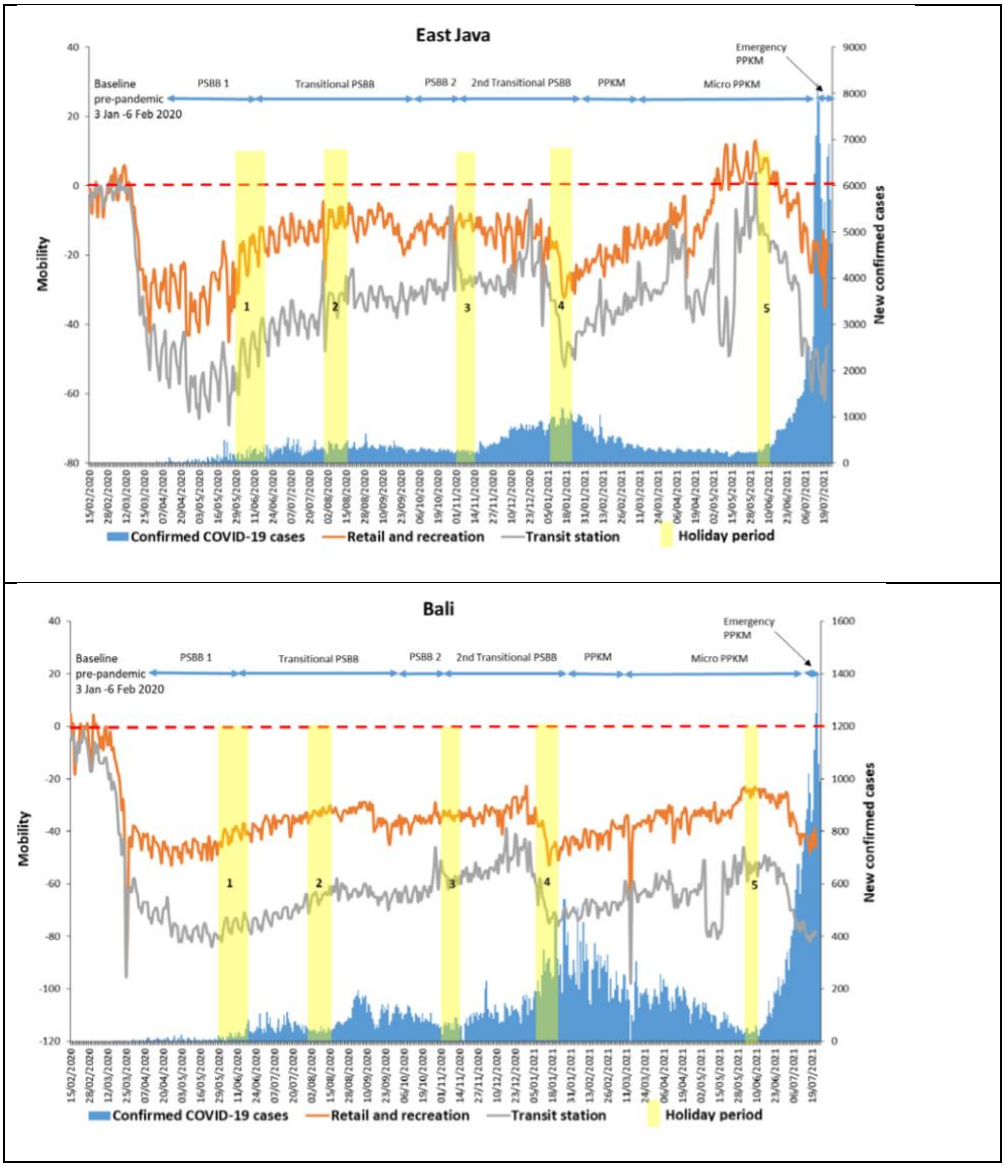
PPKM = *Pemberlakuan Pembatasan Kegiatan Masyarakat* (community activities restrictions enforcement), PSBB = *Pembatasan Sosial Berskala Besar* (movement restriction).
Source: Indonesian Bureau of Statistics, 'Transportasi' https://www.bps.go.id/subject/17/transportasi.html

According to a mobility analysis on the islands of Java and Bali – the islands with the largest numbers of COVID-19 cases in Indonesia in March 2020 – the mobility of people for business, recreation, and transit declined by around 40%–60% in all cities on both islands even before the first PSBB was announced in April 2020 (Figure 2.18). The PSBB then included large-scale community activity restrictions, including closures of schools, offices, public centres, and transport modes. In June 2020, the PSBB was changed to a transitional PSBB, during which community activities in public places, offices, industrial areas, and tourist attractions were allowed with strict implementation of health protocols, including mandatory mask use, physical distancing, and a 50% capacity limit.

Thus, until October 2020, there was an increase in retail, recreation activities, and transit. This also led to more confirmed cases of COVID-19 on Java, which, in turn, caused the re-enactment of a second PSBB until November 2020. The government implemented the *Pemberlakuan Pembatasan Kegiatan Masyarakat* (PPKM, community activity restrictions enforcement) in March 2021, which slowly increased community activity, leading to another surge in confirmed COVID-19 cases on Java in July 2021. Responding to the surge, the government announced an emergency PPKM.

Figure 2.18: Mobility Analysis in Java and Bali

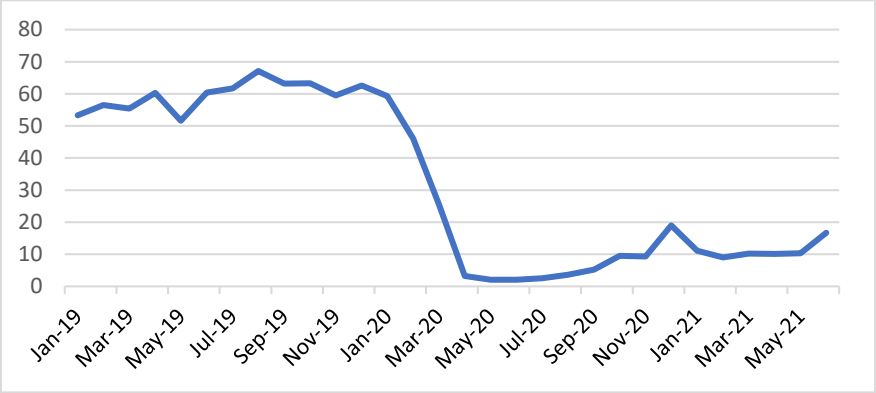




PPKM = *Pemberlakuan Pembatasan Kegiatan Masyarakat* (community activities restrictions enforcement), PSBB = *Pembatasan Sosial Berskala Besar* (movement restriction).
Note: Holiday periods comprise Eid al-Fitr 2020, Eid al-Adha 2020, Mawlid 2020, Christmas and New Year's 2021, and Eid al-Fitr 2021.
Source: WHO (2021a).

The most severely pandemic-affected sector has been tourism, which is because people have been deterred from going on vacation for fear of contracting COVID-19. Bali, the largest tourist destination in Indonesia, always had above a 50% hotel room occupancy rate prior the pandemic. However, since the pandemic, it has never exceeded 20% (Figure 2.19). The government has intervened by providing incentives and subsidies to the tourism industry in Bali and has encouraged people to work from Bali.

Figure 2.19: Hotel Room Occupancy Rate in Bali (%)



Source: Indonesian Bureau of Statistics, Pariwisata, https://bali.bps.go.id/subject/16/pariwisata.html#subjekViewTab3.html

2.6. Recommendations

Cooperation within ASEAN must be strengthened in the health sector, such as through a more equitable vaccine programme. In the economic and trade sector, AMS can increase incentives and subsidies in trade activities to increase the flow of goods and services. In the cargo and container sector, negotiations should be carried out with main-line operators to reduce freight rates and to facilitate trade. In the e-commerce sector, the government can provide subsidies to Indonesian micro and SMEs and create simpler regulations for them to export and to import. Optimising the use of data to help make efficient business decisions is also key. Regarding people's mobility, the government needs to ensure control of COVID-19 cases to make people feel safe to move. These measures will help every AMS recover, which will raise the flow of goods and services again.

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