AMRO

ASEAN +3 MACROECONOMIC RESEARCH OFFICE

ASEAN+3 REGIONAL ECONOMIC OUTLOOK (AREO) 2020

UPDATE

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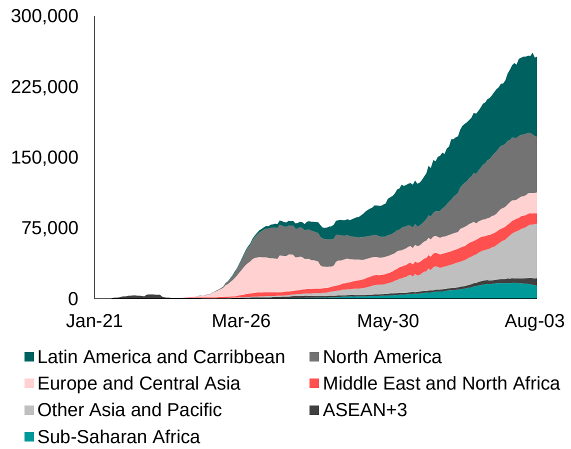
I. Introduction[1]

Economic activity is gradually resuming around the world, but the COVID-19 pandemic continues to cast a long, dark—and uncertain—shadow over the outlook for growth. Since late-January 2020, the COVID-19 virus has wreaked havoc on the global economy, halting manufacturing and services, and—especially for the ASEAN+3 region—the all-important trade sector. As of mid-July, the pandemic has infected 15 million people, and is still accelerating (Figure 1). Although the virus hotspots have moved outside the ASEAN+3 region, its economies continue to reel from the impact, with several expected to experience deep contractions this year.

Regional governments have taken unprecedented measures to contain the transmission of the virus and are, in the meantime, trying to keep domestic demand afloat. With the implementation of strict physical distancing restrictions, many ASEAN+3 economies appear to have successfully "planked the curve" (Figure 2). Infection rates have been falling in most places, albeit to the detriment of income and employment, which is being mitigated by fiscal and credit support to households and corporates, and monetary support via liquidity injections into the financial system, including through the introduction of unconventional monetary policies. Recent efforts to reopen businesses and tentatively allow some resumption in domestic and international travel have seen localized infection spikes, notably among the Plus-3, underscoring the likelihood that a "new normal" may be here to stay for the foreseeable future.[2]

Figure 1: World: New Confirmed COVID-19 Cases by Region, as of August 4, 2020

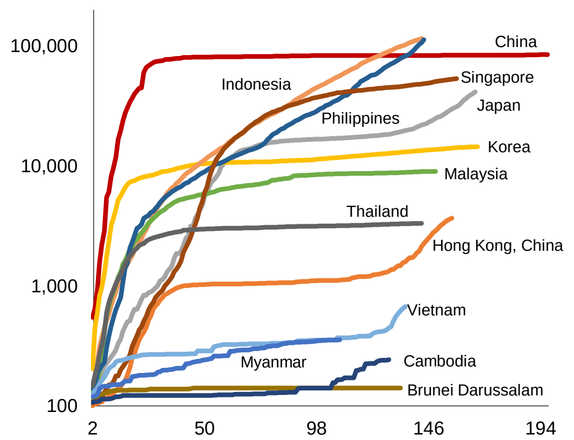
(Number of cases, 7-day average)



Sources: Johns Hopkins University via Haver Analytics; and AMRO staff calculations.

Figure 2: ASEAN+3: Cumulative COVID-19 Confirmed Cases, as of August 4, 2020

(Days after 100th confirmed case; log scale)



Sources: Johns Hopkins University via Haver Analytics; and AMRO staff calculations.

The COVID-19 pandemic has turned previously near-unthinkable events into the baseline, and introduced potentially more dangerous risks to the ASEAN+3 region in its wake. The risks that were identified in AMRO (2020a)—such as a marked deceleration in G3 growth

[1] Prepared by Marthe Hinojales, Anne Oeking (both Regional Surveillance), and Prashant Pande (Financial Surveillance); reviewed by Li Lian Ong (Financial and Regional Surveillance); approved by Hoe Ee Khor (Chief Economist).

[2] See Appendix I, Appendix Figure 1.

and a sharp slowdown in China's expansion—have become the central case and, indeed, have been supplanted on the downside, by new risks coming to the fore (Figure 3):

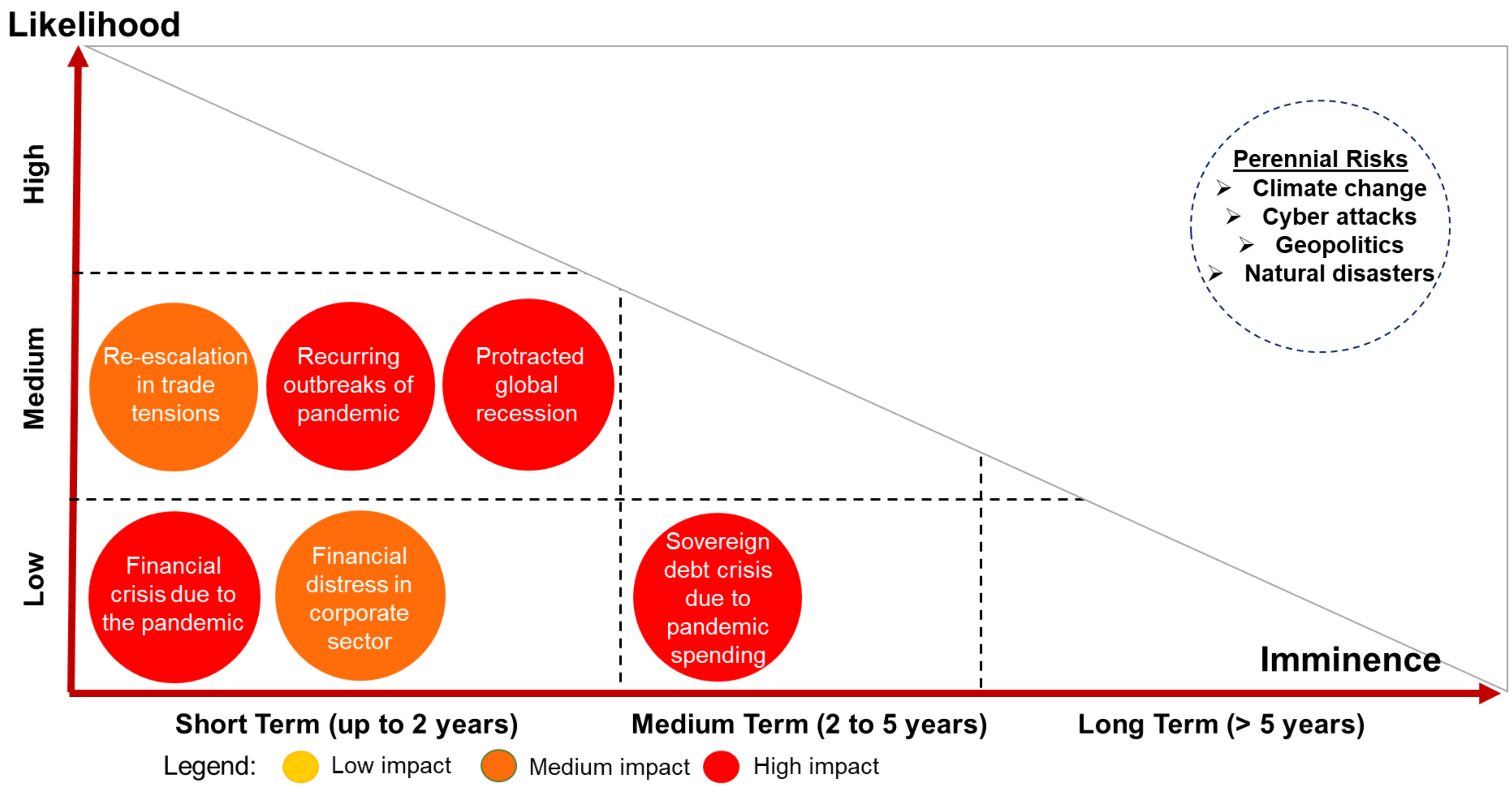
- Similarly virulent, or worse, waves of the pandemic will further damage the already-battered global and regional economies, pushing recovery further back. In addition to the intra-regional impact, economic activity in the United States and EU has also been heavily disrupted by the pandemic, and is expected to have had significant negative growth spillovers and spillbacks into the ASEAN+3 region (del Rosario and Vu, 2020). Any recurring outbreak of the virus, and the threat of further shutdowns, will persist as a short-term risk to regional financial stability and growth, likely until a vaccine is discovered and deployed.

- Protectionism, manifesting in trade conflicts, is once again rearing its ugly head. The negative rhetoric is already being amped up in some quarters, as economies across the world struggle with shortages of medical supplies and hasten to beef up their health care capacity to save lives. Separately, the lockdowns have revealed vulnerabilities in the global supply chain, in which the ASEAN+3 economies are key participants, and prompted affected countries to argue for the on-shoring of production, at least of strategic goods.

- The pandemic has also brought into play financial risks with the potential to trigger widespread instability. The abrupt and widespread loss of demand, resulting in corporate bankruptcies and rising unemployment, is putting significant strain on the region's banking systems as credit risks rise. The impact could become obvious once regulatory forbearance and the moratorium on debt servicing are lifted in the months ahead. Should recovery be delayed, poorer corporate earnings and tighter credit conditions could see a sharp rise in corporate defaults, especially in the face of depressed demand and concerns about a protracted global recession.

- Public debt ratios are rising as governments are forced to open their fiscal purses to provide unprecedented support to their economies, to see them through the shutdowns. Some ASEAN+3 economies will undoubtedly record larger fiscal deficits, which might test the boundaries of what markets may be comfortable with. Recurring waves of the pandemic, repeated shutdowns, and a prolonged recession that would require additional fiscal stimuli, could potentially trigger sovereign defaults, especially among emerging market and developing economies.

Figure 3: Global Risk Map, August 2020



Source: AMRO staff estimates.

II. Impact on External and Domestic Demand

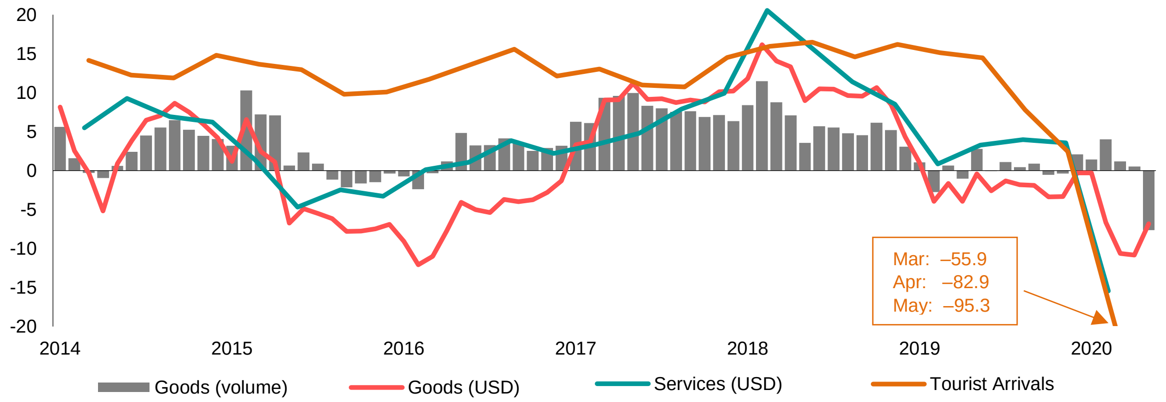
The COVID-19 pandemic quickly reversed the headway made in the region's external sector during the latter part of 2019. Trade activity had been hurt by the US-China trade conflict through most of 2019, but appeared to have received a shot in the arm following the agreement over the Phase One deal in December (Figure 4). Confidence within the region's manufacturing sector correspondingly improved following several months in the doldrums (Figure 5). The impact of the pandemic on global production manifested between February and April 2020, triggered initially by factory shutdowns and travel restrictions across China to control the spread of the virus. As the wave of infections rippled through the Asian region and swept from East to West, supply chains were disrupted, and international trade activity collapsed (Figure 6). The region's total export volume fell by 7.9 percent year-over year in May 2020, more sharply than during the fallout from the US-China trade conflict.

While the decline in ASEAN+3 exports may have slowed in June, the turnaround is likely to be short-lived. High-frequency shipping indicators suggest that the region's export outlook remains fragile (Figure 7), based on the historical correlations between exports and indicators of ship traffic and cargo tonnage, of at least 0.75 (del Rosario and Quach, forthcoming). Information for the first 11 days of July suggests that the region's exports may yet fall to a new-low, as recurring outbreaks in the region and the accelerating pandemic in other parts of the world continue to weigh on global supply chains. The collapse in export values in February 2020, when governments around the region began imposing containment measures, is also reflected in the fall in sea freight activity and the volume of cargo during that period.

Unlike the US-China trade conflict period, when the region's services trade was able to provide some support to the external sector, the pandemic has laid waste to key service sectors. In particular, the region's USD 300 billion travel and tourism industry, which had become a strong pillar of service exports in the years leading up to the pandemic, has been virtually obliterated (Figure 8). Tourist arrivals in the region plummeted by at least 95 percent year-over-year during the months of April and May, as lockdowns and travel bans led to a virtual standstill in within- and cross-border people movement. The severity of the collapse in arrivals from COVID-19 dwarfed the severe acute respiratory syndrome (SARS) experience in 2002–03 (Figure 9), and the impact has been extreme, particularly on economies such as Cambodia; Hong Kong, China (hereafter "Hong Kong"); Thailand, and the Philippines (Choo and others, 2020).

Employment across the region has been severely affected. Employment numbers have declined and unemployment rates have risen, strongly so in Malaysia, Hong Kong, and especially in the Philippines (Figure 10). Informal labor, as well as migrant workers, have also been hard hit by the widespread shutdown in business activity. It is likely that the unemployment statistics in the region could worsen, once fiscal subsidies for employers and support for businesses are eventually withdrawn, and companies have to consolidate and rebuild, or go under. In the longer term, prolonged high unemployment can have serious social and economic consequences, including for poverty, human capital, domestic demand and fiscal balances, all potentially dragging down the growth potential of an economy. In the short-term, widespread income loss can have financial stability implications through rising credit risks.

Figure 4. ASEAN+3: Goods and Services Exports
(Percent year-over-year; 3-month moving average)



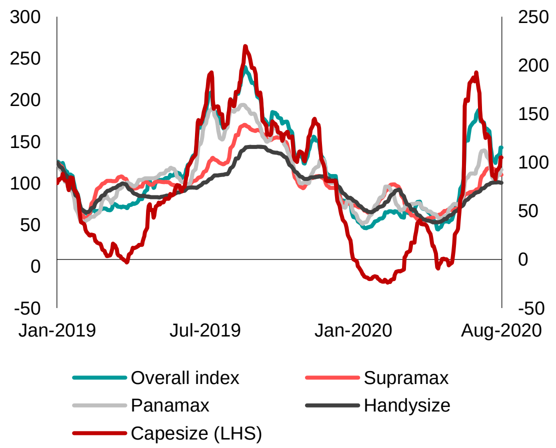
Sources: National authorities; and AMRO staff calculations.
Note: Tourist arrivals are for selected economies only where timely data are available, namely, Cambodia; Hong Kong, China; Korea; Singapore; Thailand; and Vietnam.

Figure 5. ASEAN+3: Purchasing Managers' Index (PMI) for Manufacturing

Economy	2018 Jan to Dec	2019 Jan to Dec	2020 Jan to Jul	Change from Prev Month
PLUS-3				1.1
China				0.5
Hong Kong*				5.6
Japan				1.7
Korea				2.1
ASEAN				8.1
Indonesia				10.4
Malaysia				5.4
Philippines				9.6
Singapore*				16.2
Thailand				1.9
Myanmar				9.8
Vietnam				8.4

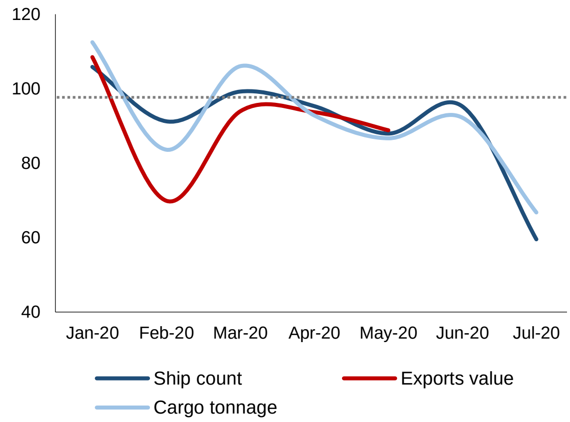
Sources: National sources; and IHS Markit.
Note: Darker shades of red denote readings further below (< 45) the diffusion level of 50; conversely, greener shades in the readings denote readings further above (> 55) the diffusion level of 50. A PMI reading above 50 denotes an increase in manufacturing activity over previous month, and a reading below 50 denotes otherwise.

Figure 6. Baltic Dry Index: Headline and Sub-Indices
(January 1, 2019 = 100)



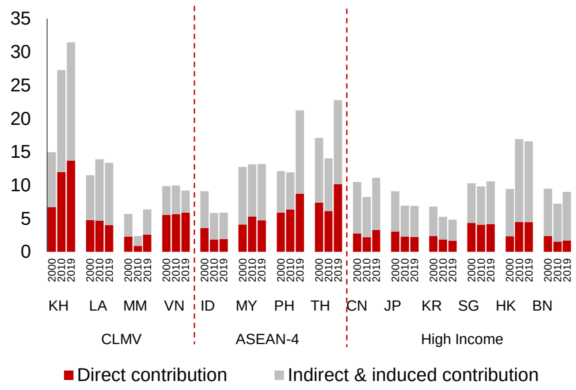
Sources: Bloomberg Finance L.P.; and AMRO staff estimates.

Figure 7. Plus-3 and Singapore: Export Value and Shipping Indicators
(Corresponding month in 2019 = 100)



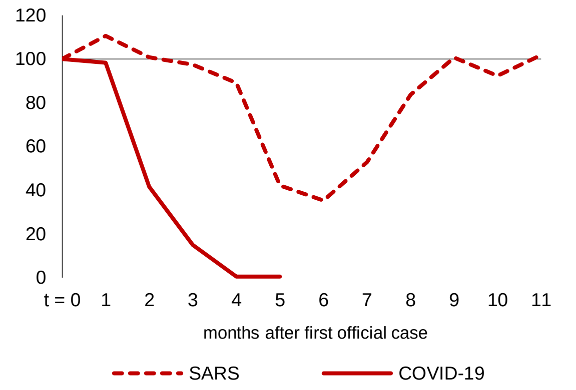
Sources: MarineTraffic; and AMRO staff estimates.
Note: Ship count and cargo tonnage for July is from July 1–11 only.

Figure 8. ASEAN+3: Travel and Tourism, 2000, 2010, and 2019
(Percentage of GDP)



Sources: World Tourism and Travel Council; The World Bank; and AMRO staff calculations.
Note: "Direct" benefits as includes only direct transactions by tourists for tourism services and products; "indirect" measures the supply chain impact; "induced" measures the impact of money spent in the local economy by employees working in jobs supported by tourism both directly and indirectly.

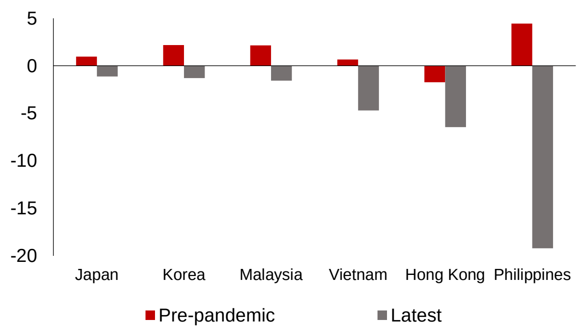
Figure 9. Selected ASEAN+3 Economies: Tourist Arrivals, COVID-19 versus SARS
(Month of first reported infection = 100)



Sources: National authorities; and AMRO staff calculations.
Note: First cases of SARS and COVID-19 were reported in November 2002 and December 2019, respectively, according to the World Health Organization. Total arrivals refer to the aggregate of visitors or tourist arrivals reported by Cambodia; Hong Kong; Korea; Singapore; Thailand; and Vietnam.

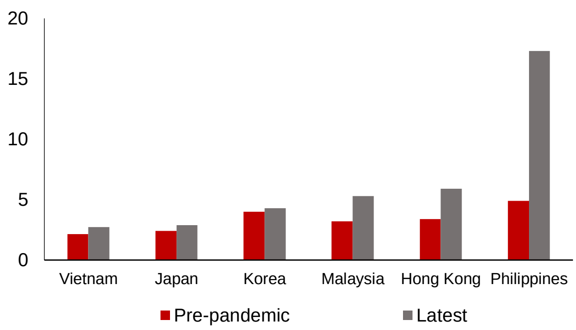
Figure 10. Selected ASEAN+3 Economies: Employment

Change in Total Employment
(Percent year-over-year)



Sources: Haver Analytics; and AMRO staff calculations.
Note: Pre-pandemic data refers to January 2020 for Japan, Korea, Hong Kong and Malaysia; and to Q4-2019 for the Philippines and Vietnam. The latest data refers to May 2020 for Japan, Hong Kong and Malaysia; June 2020 for Korea; and Q2-2020 for the Philippines and Vietnam.

Unemployment Rate
(Percent)



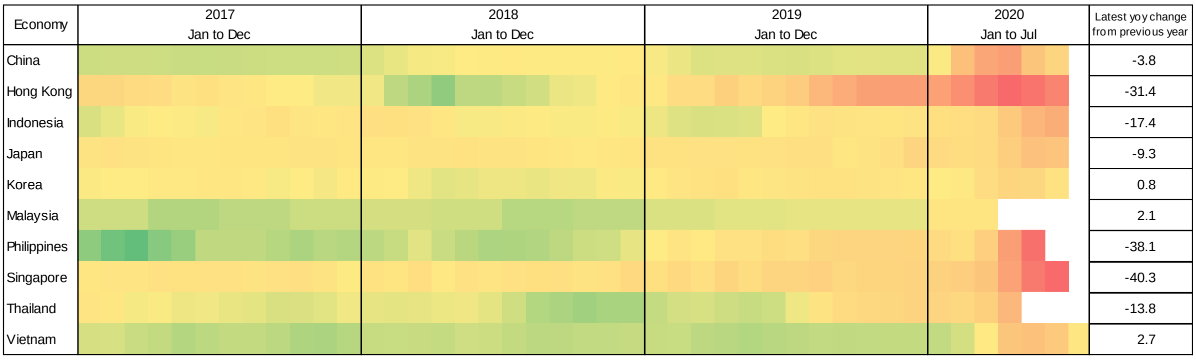
Sources: Haver Analytics; and AMRO staff calculations.
Note: Pre-pandemic data refers to January 2020 for Japan, Korea, Hong Kong and Malaysia; and to Q4-2019 for the Philippines and Vietnam. The latest data refers to May 2020 for Japan, Hong Kong and Malaysia; June 2020 for Korea; and Q2-2020 for the Philippines and Vietnam.

With the disruption to labor markets, the lockdown and bleak outlook for the region's key sectors dealt further blows to consumer confidence. Retail sales weakened considerably across the region in H1 2020 (Figure 11), notwithstanding massive fiscal stimuli to buttress consumer spending, in the form of wage subsidies and allowances for employment. Demand has been hardest hit in places where containment measures have been stricter, and which also rely significantly on international visitors (e.g., Hong Kong, Singapore),[3] or where rising infections may have dampened sentiment and increased caution about mobility (e.g., Indonesia, the Philippines), while the worst appears to be over for countries that implemented early containment measures (e.g., China, Korea, and Vietnam). The loss of

[3] Retail sales in Hong Kong have also been negatively affected by social unrest.

tourism and continuing travel bans continue to affect retail sales. Uncertainty about the "new normal" is continuing to dampen consumer sentiment and domestic demand across the region, and full recovery will be contingent on bringing infections under control.

Figure 11. Selected ASEAN+3 Economies: Retail Sales
(Percent year-over-year, 3-month moving average)



Sources: CEIC Data; Haver Analytics; and AMRO staff estimates.
Note: Linear interpolation of quarterly data for Malaysia.

III. The Evolving Stages of Market Sentiment

Market sentiment has morphed from fear to relief to optimism, and is currently at the caution stage. Financial markets—both globally and regionally—were severely hit in March when the pandemic was declared; investors grappled with the unknown and quickly de-risked. Monetary easing and liquidity injections, complemented by large fiscal stimulus measures, subsequently provided relief for markets. Led by the US Federal Reserve, whose actions helped address US dollar funding stress (Pande and del Rosario, 2020), central banks around the world cut their policy rates. Some—including several ASEAN+3 central banks—announced additional easing through unconventional asset purchases, which, in some cases, could be characterized as "lender of last resort" operations to the corporate sector.

The recovery in markets accelerated as lockdowns started easing around the world in May and was further supported by a recovery in sentiment.[4] Despite concerns over markets running ahead of themselves, investors were optimistic that policy support has reduced downside risks:

- Regional equities recovered some of their Q1 losses, but there was a clear distinction between Northeast and Southeast Asia markets, with the former either declining less in Q1 or staging a stronger recovery in Q2 (Figure 12). China's benchmark index is one of the few major indices which has turned positive year-to-date, while the KOSPI index has recovered most of its losses. Malaysia's KLCI has been the exception among ASEAN markets, boosted by the rally in the stocks of glove manufacturers.

- Sectoral equity prices show clear divergence in the market perceptions of their respective outlook. Heath Care and Communication services have not only recovered from the initial slump, but have strengthened to levels well above their

[4] See Appendix II, Appendix Figure 2.

end-2019 levels in the majority of markets (Figure 13). On the other hand, Financials, Energy, and Real Estate have weakened significantly in the year-to-date.

- Regional currencies have also retraced some of their Q1 weakness against the US dollar. That said, only the Japanese yen, Myanmar kyat and Philippine peso are currently stronger than their end-2019 levels against the US dollar. The Indonesian rupiah—which has experienced the largest swings, with a year-to-date trading range of 20 percent against the US dollar—depreciated by 16 percent in Q1 but rebounded by 11 percent in Q2.

- Bond yields across the region continued to fall against a backdrop of global monetary easing and improving capital flows. Although the increase in fiscal financing has raised concerns over large bond issuances, markets have been able to absorb the additional supply thus far.

Figure 12. ASEAN+3 and Selected Advanced Economies: Performance of Equity, Exchange Rate, and Government Bond Markets, as of August 4, 2020

Economy	Benchmark equity index (log returns)					Currency (against USD, log returns)					10-year yield (basis points)				
	Level	Q2, Q3 (QTD) 2020	Q1 2020	2019	2018	Level	Q2, Q3 (QTD) 2020	Q1 2020	2019	2018	Level	Q2, Q3 (QTD) 2020	Q1 2020	2019	2018
US	3,307	24.6%	-22.3%	25.4%	-6.4%	98.4	-6.5%	3.3%	0.3%	4.1%	0.51	-16.3	-124.8	-76.7	27.9
EU	3,254	15.5%	-29.6%	22.1%	-15.5%	1.177	7.2%	-2.4%	-2.0%	-4.5%	-0.55	-8.2	-28.6	-42.7	-18.5
UK	6,036	6.2%	-28.5%	11.4%	-13.3%	1.303	6.3%	-6.4%	3.3%	-5.8%	0.12	-23.5	-46.4	-45.8	8.7
CN	3,372	20.4%	-10.3%	20.1%	-28.2%	6.983	1.6%	-2.0%	-1.2%	-5.5%	2.97	38.7	-55.5	-16.4	-57.9
HK	24,947	5.5%	-17.8%	8.7%	-14.6%	7.750	0.0%	0.4%	0.6%	-0.2%	0.78	0.0	-98.6	-24.3	17.3
JP	22,574	17.7%	-22.4%	16.7%	-12.9%	106.1	2.3%	-0.1%	1.4%	2.2%	0.02	-0.4	3.3	-1.4	-4.5
KR	2,280	26.2%	-22.5%	7.4%	-19.0%	1,195	2.5%	-5.9%	-3.5%	-4.4%	1.31	-24.7	-12.0	-28.4	-51.1
ID	5,075	11.2%	-32.8%	1.7%	-2.6%	14,625	10.9%	-16.2%	3.7%	-5.9%	6.84	-107.1	85.1	-96.2	170.6
MY	1,576	15.4%	-16.2%	-6.2%	-6.1%	4.221	2.3%	-5.4%	1.0%	-2.0%	2.45	-89.3	5.1	-77.4	16.5
PH	5,776	8.2%	-38.4%	4.6%	-13.7%	49.1	3.2%	-0.1%	3.7%	-5.2%	2.70	-163.3	-1.6	-266.8	208.5
SG	2,516	1.4%	-26.2%	4.9%	-10.3%	1.376	3.5%	-5.8%	1.2%	-2.0%	0.87	-42.1	-45.4	-29.9	3.6
TH	1,331	16.7%	-33.9%	1.0%	-11.5%	31.1	5.3%	-9.7%	8.4%	0.6%	1.19	-21.2	-8.1	-100.5	15.9
KH	665	11.8%	-25.4%	46.0%	33.4%	4,125	-1.5%	0.0%	-1.0%	0.2%					
LA	589	-2.7%	-18.4%	-13.9%	-17.7%	9,072	-1.4%	-0.7%	-3.9%	-2.9%					
MM	447	6.4%	-8.4%	11.7%	-13.5%	1,360	2.2%	6.0%	3.8%	-11.9%					
VN	828	22.2%	-37.2%	7.4%	-9.8%	23,177	1.9%	-1.9%	0.2%	-2.2%	2.935	-60.5	12.4	-170.9	-7.9

Sources: Haver Analytics; and AMRO staff calculations.
Note: CN = People's Republic of China; EU = euro area; HK = Hong Kong; ID = Indonesia; JP = Japan; KH = Cambodia; KR = Korea; LA = Lao People's Democratic Republic; MY = Malaysia; PH = the Philippines; SG = Singapore; TH = Thailand; UK = United Kingdom; US = United States; VN = Vietnam; QTD = quarter-to-date.

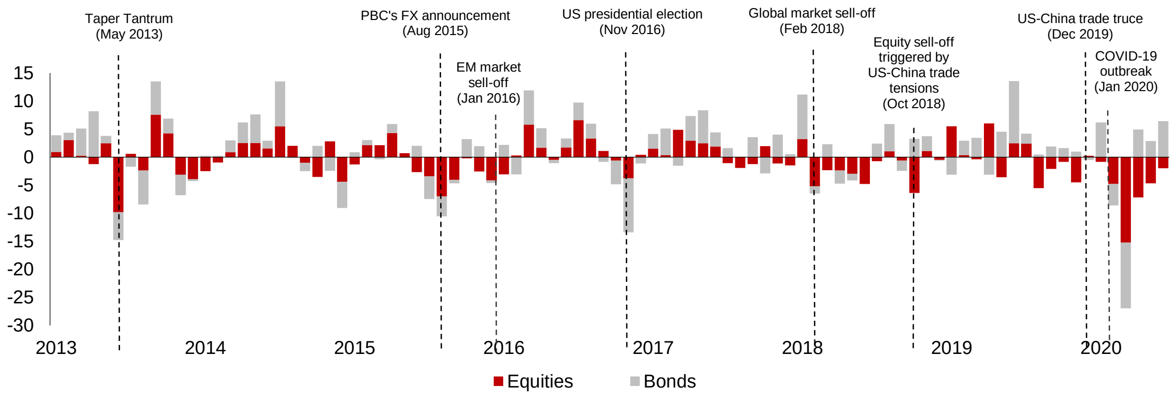
Overall, capital flows into and out of regional markets have been mixed. Outflows from equity markets have continued but at a much lower volume compared to the US dollar funding stress period in March (Figure 14). In contrast, bond inflows resumed in April and have actually turned positive year-to-date, led by inflows into Korean bonds. The resurgence in virus infections, notably in the United States, along with rising trade tensions, have heightened market caution in recent weeks. While there has not been any significant correction yet, the rally in the markets appear to be losing steam, as investors wait and watch for further developments.

Figure 13. Selected ASEAN+3: Changes in Equity Markets by Sector, Year to August 4, 2020

Sector	CN	HK	JP	KR	ID	MY	PH	SG	TH	VN
Communication Services	6.5	17.6	3.0	37.1	-11.2	-11.8	18.1	-25.2	-12.2	-1.6
Consumer Discretionary	25.4	-10.8	-10.7	-7.3	-19.8	-29.0	-31.7	-25.5	10.4	-23.9
Consumer Staples	54.0	-0.4	-9.4	-0.7	-4.9	-1.9	-5.6	-6.4	3.5	0.9
Energy	-10.8	-18.5	-29.7	-11.0	-8.5	-0.3	-49.7		-16.2	-16.8
Financials	0.5	-10.3	-21.7	-13.7	-16.3	-13.1	-35.6	-22.5	-29.5	-16.3
Health Care	50.6	15.1	8.3	68.1	14.7	122.1			6.5	0.1
Industrials	13.1	-14.8	-16.5	-1.9	-28.4	-4.6	-18.0	-30.2	-20.5	-12.5
Information Technology	10.6	7.8	-9.7	-7.4	-6.2			8.0	45.5	0.2
Materials	19.2		-15.7	14.8	-9.3	-9.9			-2.1	11.8
Real Estate	14.2	-16.7	-31.4	0.0	-38.0		-29.0	-16.8	-19.7	-11.3
Utilities	8.4	-20.2	-13.6	-23.2	-19.2	-8.2	-5.7		-6.5	-17.9
Equity Index	**13.0**	**-10.8**	**-4.0**	**1.7**	**-13.5**	**2.5**	**-21.2**	**-21.7**	**-12.9**	**-11.5**

Sources: Bloomberg Finance L.P.; and AMRO staff calculations.
Note: Changes are in percent, except for the 10-year yield. The stocks included in the benchmark indices are classified into sectors as per MSCI GICS classification. The stocks included in the benchmark indices are classified into sectors as per MSCI GICS classification. CN = People's Republic of China; HK = Hong Kong; JP = Japan; KR = Korea; ID = Indonesia; MY = Malaysia; PH = the Philippines; SG = Singapore; TH = Thailand; VN = Vietnam.

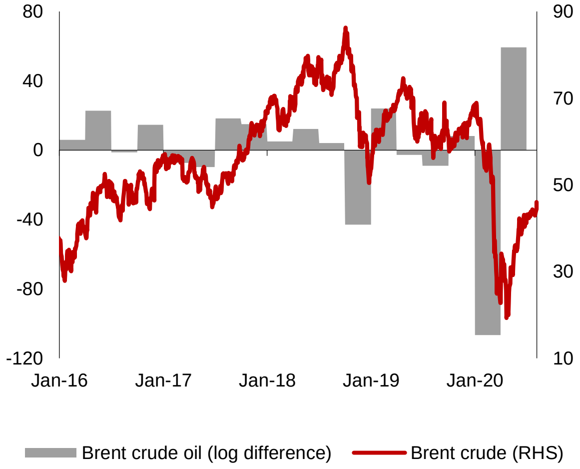
Figure 14. ASEAN-4, Korea, and Vietnam: Net Foreign Portfolio Investment Flows, as of June 2020



Sources: National authorities; and AMRO staff calculations.
Note: ASEAN-4 = Indonesia, Malaysia, the Philippines, and Thailand; EM = emerging market; FX = exchange rate; PBC = People's Bank of China; US = United States.

One of the key themes in commodity markets has been the weakness in oil prices. Crude prices fell precipitously during the January–April period (Figure 15), driven by a collapse in demand due to the COVID-19 pandemic, failure by OPEC+ to agree on production cuts, and a shortage of storage facilities (Pande, 2020a). Since then, the gradual easing in pandemic containment measures around the world, as well as deep production cuts agreed by the OPEC+ group of countries, has helped stabilize and turn around oil prices, which rose rapidly in May and early-June. However, several factors are likely to be a drag on prices going forward, notably: (1) the significant build-up in inventory in H1 2020 (Table 1); (2) supply coming back to the market as a result of OPEC+ non-compliance; (3) the resumption in supply from shut-ins (that is, when an oil or gas well has available but unused capacity); and (4) the possibility of recurring virus outbreaks and further lockdowns (Pande, 2020b).

Figure 15. Oil Prices, since January 2016
(Percent quarter-over-quarter; US dollars per barrel)



Sources: Haver Analytics; and AMRO staff calculations.

Table 1. Oil Supply and Demand Forecasts, as of June 2020
(Million barrels per day)

EIA	Supply	Demand	Supply surplus
Q1 2020	100.8	95.2	5.5
Q2 2020	92.3	84.4	7.9
Q3 2020	90.8	94.3	-3.4
Q4 2020	94.5	97.6	-3.1
2020 (average)	94.6	92.9	1.7
Q1 2021	96.5	98.3	-1.8
Q2 2021	98.6	99.3	-0.7
Q3 2021	99.7	100.8	-1.1
Q4 2021	100.2	101.1	-0.9
2021 (average)	98.8	99.9	-1.1
OPEC	**Supply**	**Demand**	**Supply surplus**
Q1 2020	100.0	92.4	7.7
Q2 2020	91.7	82.0	9.7
Q3 2020	88.2	92.2	-4.0
Q4 2020	91.7	96.2	-4.6
2020 (average)	92.9	90.7	2.2
Q1 2021	92.6	96.3	-3.6
Q2 2021	92.8	96.9	-4.2
Q3 2021	97.7	97.9	-0.2
Q4 2021	99.3	99.7	-0.4
2021 (average)	97.1	97.7	-0.6

Sources: EIA (2020); OPEC (2020); and AMRO staff calculations.

IV. A Panoply of Pandemic Policies

To deal with the economic fallout from the pandemic, ASEAN+3 governments and central banks have provided fiscal stimulus and monetary policy support of unprecedented scale. Aided by strong economic fundamentals, the adoption of prudent macro-policies over time has afforded the region's policymakers some space to support the economy (Poonpatpibul and others, 2020). Both budgetary and non-budgetary sources have been taken to save lives and protect livelihoods and businesses (Figure 16). The overall fiscal stimuli to date have averaged 11 percent of GDP across the region, although the sizes of the stimuli have varied greatly, depending on the space available to each economy. The monetary policy toolkit has also been expanded to include unconventional measures for the first time in some cases.

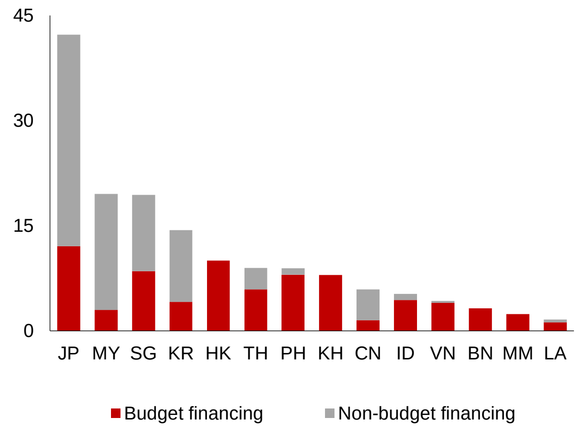
In most ASEAN+3 economies, fiscal policy largely targeted households and corporates. Initially, discretionary fiscal measures focused on the immediate needs of the health care system and epidemic control. However, policy was quickly directed to support the economy when the extent of the damage from the shutdowns became clear. Almost all governments have provided direct cash transfers to households or individuals to support them through the lockdown period (Table 2). Concurrently, tax deductions, temporary waivers of regulatory requirements, and credit support have been introduced to alleviate pressure on businesses and prevent widespread insolvency, while government co-payment of wages has supported employment. Other key measures include government guarantees on select bank lending activities, especially to the more vulnerable small- and medium-sized enterprises.

Regional central banks provided support to the economy and financial markets by employing a suite of monetary policy tools. With inflation largely under control or non-existent, the majority of central banks cut key interest rates several times during H1 2020. Other conventional monetary policy measures include the injection of liquidity into banking systems via reductions in reserve requirements, and making available US dollar liquidity assistance to banks. Lending programs to banks to support the financing of SMEs are being prioritized across the region. Some of the region's central banks also applied unconventional measures—some for the first time—such as purchasing corporate bonds in secondary markets to support the hard-hit corporate sector (Korea, Thailand), and buying government bonds in the secondary markets (Korea, Philippines, Thailand). Bank Indonesia announced a formal framework for burden sharing with the government through the purchase of government debt in the primary market and sharing of interest costs.

In a rare move, the region's financial supervisors and regulators have widely afforded temporary regulatory forbearance to financial institutions. With many of the region's banking systems having built strong capital buffers since the Asian financial crisis (Figure 17), regulators have been facilitating the provision of relief to borrowers by easing requirements on banks. The more common practices include allowing banks to draw down on capital and liquidity buffers, easing debt classification requirements to facilitate restructuring, and enabling more flexible treatment of non-performing loans to avoid additional provisioning.

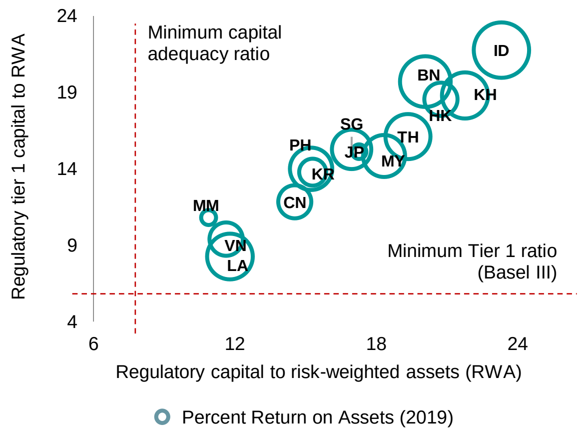
The trajectory of the pandemic over the next six months is highly uncertain. While the number of infections is rising globally, they appear largely under control in many of the ASEAN+3 economies. However, the ability of a region or country to adequately contain the virus will only be as strong as its weakest link (Hinojales, Oeking, and Ong, 2020b). Should there be a concerted resurgence in the COVID-19 virus in the coming months, most ASEAN+3 economies would still have some space to adopt more accommodative monetary and fiscal policies if more official support is needed. Many central banks hold substantial foreign exchange reserves, while exchange rate flexibility could also buffer against shocks. However, regional policymakers will need to strategically use this policy room to boost growth while safeguarding financial stability, in part by maintaining tight macroprudential policies for the time being.

Figure 16. ASEAN+3: Economic Stimulus Packages
(Percent of GDP)



Sources: National authorities; and AMRO staff estimates.
Note: The estimates are based on the governments' announced stimulus packages across regional economies from February 1 to August 3, 2020; and do not include monetary policy and other indirect support measures, such as regulatory forbearance.

Figure 17. ASEAN+3: Capital Adequacy of Banking Systems, 2019
(Percent of risk-weighted assets)



Sources: Haver Analytics; national authorities; and AMRO staff calculations.
Note: Capital ratios for China and Japan as of Q3 2019; Myanmar as of Q4 2018, and Vietnam as of Q2 2019. Asset ratios for Korea as of Q4 2017, and Myanmar as of Q2 2018.

Table 2. ASEAN+3: Overview of Key Pandemic Policies, since February 1, 2020

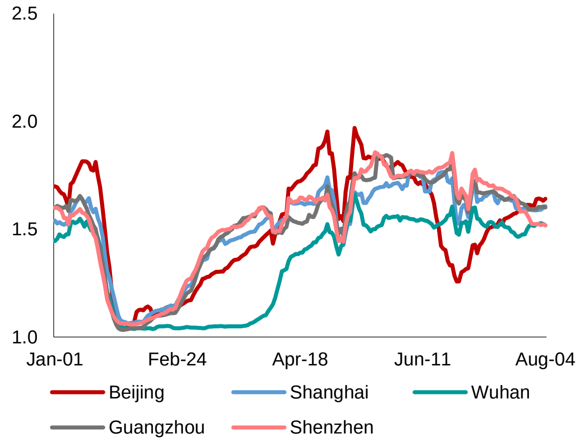
Assessment as of July 23, 2020		Plus-3				ASEAN									
Fiscal Measures		CN	HK	JP	KR	BN	ID	KH	LA	MM	MY	PH	SG	TH	VN
Individuals/ Households	Direct cash transfers		•	•	•		•	•			•	•	•	•	•
	Suspension of rental fees, loan and interest payments	•	•	•	•	•	•		•	•	•	•	•	•	•
	Debt restructuring						•							•	•
	Government guarantee on minimum wages and extra allowances for employees		•		•	•		•	•		•	•	•		•
	Tax deferrals, waivers and rebates on selected purchases	•		•	•	•	•	•	•	•	•	•	•	•	
	Waived fees for digital services (e.g. for banking needs, selected telecommunication charges)					•					•	•		•	•
	Price freeze on basic necessities								•			•		•	
	Fee cuts or payment deferrals for services (e.g. transportation; utilities)	•	•	•		•	•		•	•	•			•	•
Businesses	Income tax reductions for key sectors, such as medical services	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Moratoriums on debt payments	•	•		•	•	•	•	•	•	•	•	•	•	•
	Lifting of import restrictions on local enterprises	•	•			•	•		•	•		•			
	Government guarantees on debt	•	•	•	•		•				•	•			
	Reduction or deferral of customs payments for some importers	•				•	•		•					•	
	Higher tax benefits for listed companies											•		•	
	Subsidies for maintaining employment		•	•	•						•		•	•	
	Waived transaction fees for selected securities											•			•
Monetary Measures															
Businesses	Credit subsidies and credit extension to SMEs	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Temporary financing lines to manage cash flow	•	•	•	•	•	•	•		•	•	•	•	•	•
	Provision of low-cost loans and soft loans		•	•	•		•			•	•		•	•	•
	Allowing more corporate bond issuances to support cash flow, including supply chain financing	•			•								•		
	Purchases of bonds issued by hard-hit companies			•	•									•	
Financial institutions	Intervention to ease liquidity and expand banks' lending capacity, including aggressive lowering of reserve requirement ratios	•			•		•	•	•	•	•	•		•	
	Temporary measures to provide USD liquidity		•	•	•		•						•		
	Full access to low-cost funding for MFIs									•					
Asset Markets	Active purchases of government bonds and papers to stabilize asset markets			•	•		•					•		•	
	Suspension of short-selling in the stock exchange				•		•				•			•	
Regulatory Forbearance															
Capital Adequacy/ Liquidity	Lower required capital or countercyclical capital buffers		•				•	•			•		•		
	Lower select liquidity coverage ratios (e.g. foreign exchange) and loan-deposit ratios being imposed		•		•		•			•	•	•			
	Lower collateral ratios for select settlement activities/ expanding eligibla collateral			•	•						•				
	Higher range of securities eligible for open market operation transactions				•		•								
	Relaxed penalties imposed on institutions with reserve deficiencies											•			
Lending and Borrowing	Flexible treatment of non-performing loans, thus allowing no additional provisioning on bank balance sheets		•	•					•		•	•	•	•	•
	Eased loan restructuring and/or Know-your-Customer rules						•	•	•	•		•		•	•
	Permission to draw down on capital and liquidity buffers to support lending activities		•	•			•	•			•	•	•		
Other Activities	Delayed new, tighter rules on asset management activities	•													
	Relaxed rules on buyback of shares						•								
	Higher trading limits and on FX forward positions				•										
	More flexible timelines for bank's reporting requirements			•							•	•			

Source: National authorities; and AMRO (2020b).

V. A Nervous Outlook for 2020–21

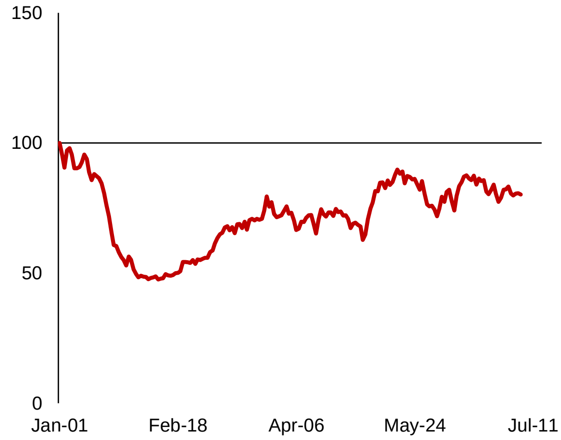
While the COVID-19 pandemic will have deep global ramifications for years to come, there are welcome signs of a turnaround in economic activity in the short-term outlook. Economic activity is gradually returning to pre-pandemic levels in China, with traffic congestion moving into the lower-end of the historical range, and power generation at between 80–90 percent of early-January output (Figures 18 and 19). Elsewhere in the region, trends in high-frequency mobility data suggest that activity started turning around in most economies in April 2020, as governments began to lift physical restrictions (Figures 20 and 21). Activity was least affected among the Plus-3 countries because of the quickness with which authorities acted to limit the infections, while the ASEAN-5 group is slowest to recover, with cases still rising in Indonesia and the Philippines, and Malaysia and Singapore yet to fully stamp out new cases. The BCLMV[5] countries were proactive in taking social distancing measures and were very successful in containing the pandemic to low levels.

Figure 18. China: Daily Traffic Congestion Index, 2020
(7-day average)



Sources: Wind; and AMRO staff calculations.
Note: Congestion delay index = the travel time under traffic congestion/ travel time under free flow.

Figure 19. China: Coal Consumption, Six Major Power Generation Groups, 2020
(January 1, 2020 = 100)

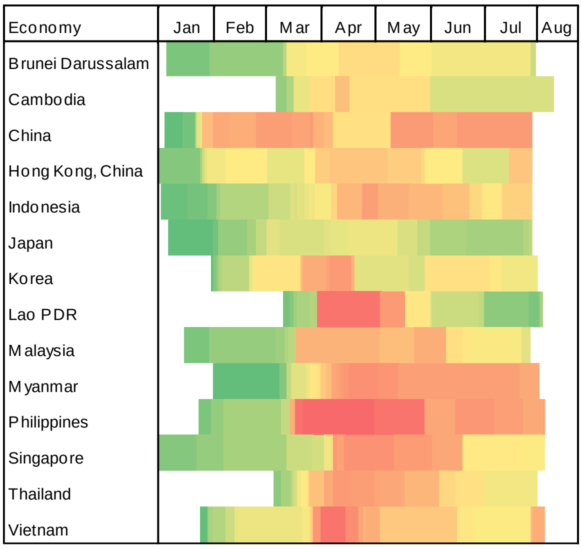


Sources: Wind; and AMRO staff calculations.
Note: Data are as of July 6, 2020, as three out of the six generation groups have ceased reporting their data.

Correspondingly, business sentiment across most manufacturing and service sectors in the region is also bottoming out. The sectoral PMI shows a marked slowdown in the decline in activity between May and June (Figure 22), and, indeed, activity is turning around in services, as anticipated in Hinojales and others (forthcoming). There are also incipient signs that the hardest hit travel and transportation industries may have reached their nadir, and in some cases are rebounding. Flight departures are trending up in China owing to a pick-up in domestic travel, and appear to have troughed in many countries (Figure 23). Relatedly, the price of jet fuel is also strengthening, albeit well below pre-pandemic levels (Figure 24). Nonetheless, tourism, and its ancillary services, are expected to remain weak for some time to come, likely until the virus is largely stamped out or a vaccine is found.

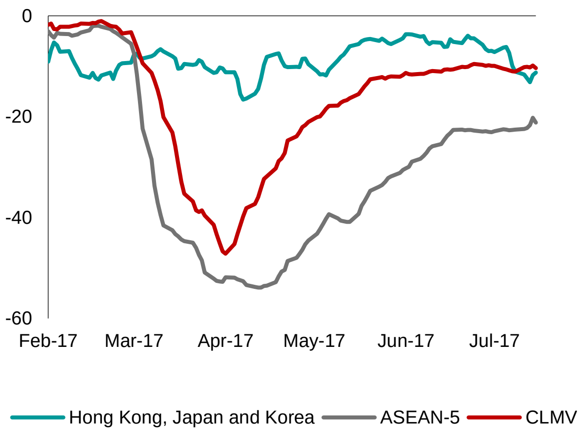
[5] Brunei Darussalam, Cambodia, Lao PDR, Myanmar, and Vietnam.

Figure 20. ASEAN+3: Government Response Stringency Index, as of August 5, 2020



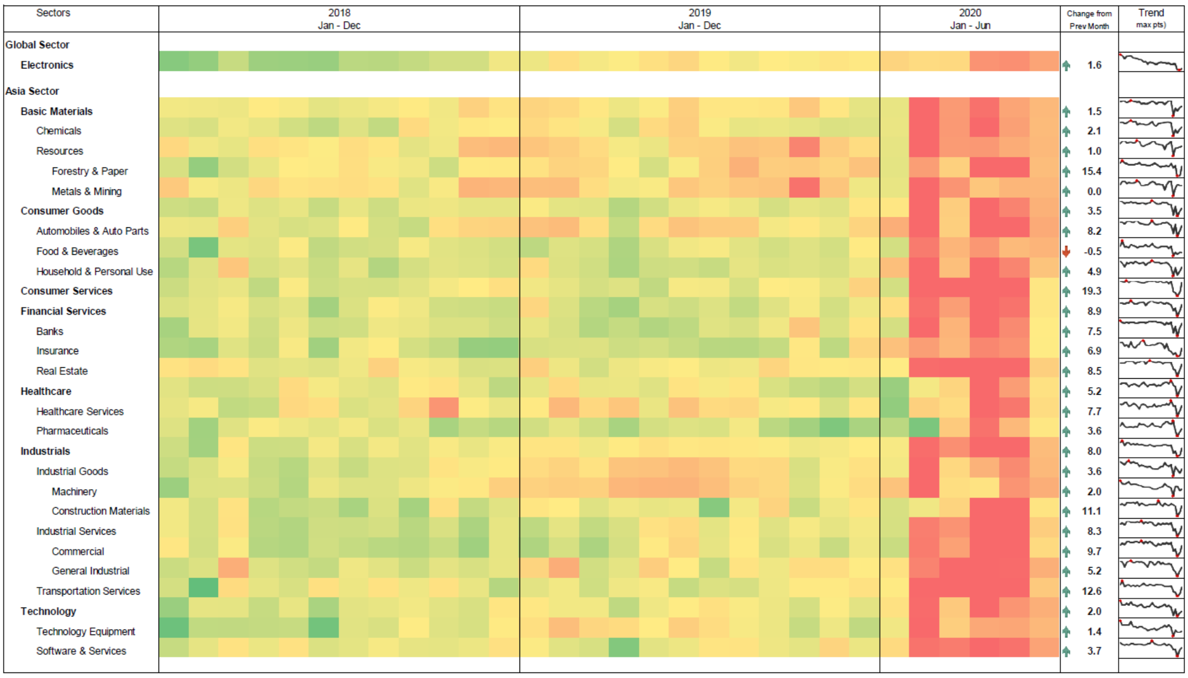
Source: Hale and others (2020).
Note: The index records the number and "strictness" of government policies for containing COVID-19, using nine closure indicators (including school, work, and border travel). The redder the color, the more stringent the set of policies vis-a-vis the rest of the world, and can be taken to mean that COVID-19 infections are still not under control.

Figure 21. Selected ASEAN+3 Economies: Aggregate Mobility for Non-residential Areas
(Percentage change from baseline, 5-day moving average)



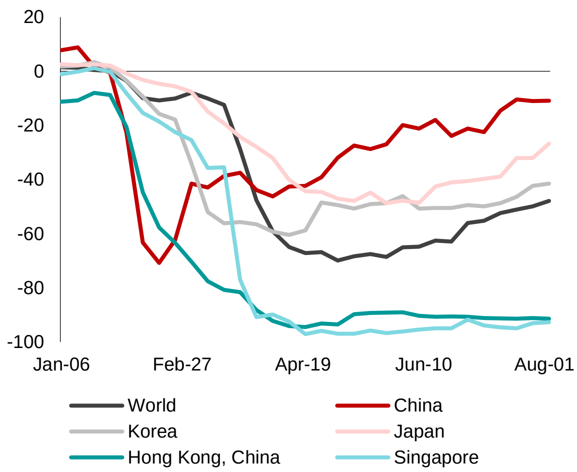
Sources: Haver Analytics, sourced from Google COVID-19 Community Mobility reports; and AMRO staff calculations.
Note: "Non-residential" mobility refers to the aggregated mobility data for places such as groceries and pharmacies, retail and recreation facilities, parks, transit stations and workplaces. Data for Brunei Darussalam and China are not available. Baseline refers to January 3–February 6, 2020.

Figure 22. Monthly Purchasing Managers' Index (PMI): Global Electronics and Asia Sectors



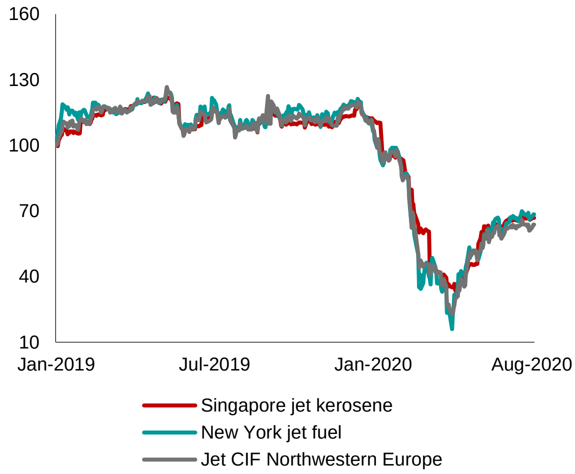
Source: IHS Markit.
Note: The PMI headings are coded by colors. The deeper the red the further below (< 40) from the diffusion level of 50; greener denotes the further above (> 60) from 50. A PMI reading above 50 denotes an increase in business activity over previous month, and a reading below 50 denotes otherwise.

Figure 23. Flight Departures, 2020
(As of the week of August 3; percent year-on-year)



Sources: Official Aviation Guide; and AMRO staff calculations.

Figure 24. Price of Jet Fuel
(January 1, 2020 = 100, as of August 4, 2020)



Sources: Intercontinental Exchange via Bloomberg Finance L.P.; and AMRO staff calculations.

AMRO expects the region's weak economies to rebound in 2021, in part because of this year's low base, but high uncertainty surrounds these projections. GDP is forecast to remain flat in 2020, after expanding by 4.8 percent last year (Table 3). The recovery is anticipated to follow a gradual U-shape, led by China, which is projected to grow by 2.3 percent this year compared to 6.1 percent in 2019. A total of 9 of the 14 ASEAN+3 members are expected to contract in 2020, including Japan and Korea. The ASEAN region is forecast to contract by 2.6 percent in 2020, from positive growth of 4.6 percent last year. The smaller economies of Brunei Darussalam, Lao PDR, Myanmar, and Cambodia, are expected to weather the pandemic better than their larger peers. On a more optimistic note, AMRO's baseline is that all ASEAN+3 economies will return to positive growth averaging 6 percent in 2021. However, this trajectory assumes that any unwinding of policy measures proceeds smoothly, and is predicated on the effective containment of the COVID-19 virus, both regionally and globally.

Going forward, the manner in which exit from the raft of pandemic policies is managed will be key to ensuring economic and financial stability in the AEAN+3 region. It will be particularly important in three areas:

- Governments would have to withdraw financial support to non-financial corporations and individuals to maintain the soundness of fiscal finance, while balancing against corporate bankruptcies and unemployment. Any negative impact would be felt through both a precipitous fall in domestic demand and a sharp rise in banks' credit risks and expected losses.

- Similarly, financial regulators must design the exit from regulatory forbearance appropriately, to avoid moral hazard while guarding against any sudden shock to bank balance sheets. Any sustained increase in the probability of financial distress among the region's highly interconnected banks could ripple through its increasingly integrated financial system (Sun, 2020), resulting in very large additional costs from direct credit losses and "collateral damage" from contagion (Figure 25).

- Central banks should terminate their liquidity injections into the financial system to avoid the development of asset bubbles and inflationary pressures while guarding against an excessive tightening of credit condition.

However, the biggest challenge facing ASEAN+3 policymakers will be balancing the trade-off between easing restrictions to revive the economy and risking a second or even third wave of infections. Developments observed elsewhere in the world serve as salient lessons for the region's policymakers when designing the lifting of current curbs on domestic activity and, more so, cross-border travel (Hinojales, Oeking, and Ong, 2020b). For the region to open up fully, the virus must be fully contained in all countries. Otherwise, the virus will spread from the infected countries to others, and there will be another round of lockdowns, which the region can surely ill-afford.

Table 3. ASEAN+3: AMRO Growth Projections, 2019–21

Economy	2019 *(Actual)*	AREO 2020 *(March 2020)*		AREO 2020 Update *(August 2020)*	
		2020p	2021p	2020p	2021p
ASEAN+3	**4.8**	**4.2**	**5.0**	**0.0**	**6.0**
Plus-3	4.9	4.2	5.0	0.7	6.1
China	6.1	5.3	6.1	2.3	7.0
Hong Kong, China	–1.2	–0.5	1.8	–7.0	4.5
Japan	0.7	0.1	0.6	–5.4	2.8
Korea	2.0	2.0	2.6	–1.0	3.4
ASEAN	**4.6**	**4.4**	**5.0**	**–2.6**	**5.7**
Brunei Darussalam	3.9	3.5	2.9	1.6	3.1
Cambodia	7.1	6.2	6.9	–1.8	6.5
Indonesia	5.0	4.9	5.2	–0.8	5.2
Lao PDR	6.0	6.1	6.5	0.5	4.6
Malaysia	4.3	4.0	4.6	–3.2	5.7
Myanmar	6.8	6.0	6.9	1.1	6.2
The Philippines	5.9	6.2	6.6	–6.6	6.5
Singapore	0.7	0.8	2.6	–6.0	7.0
Thailand	2.4	1.5	3.2	–7.8	4.6
Vietnam	7.0	6.6	6.8	3.1	7.0

Source: AMRO staff estimates.
Note: p = projections.

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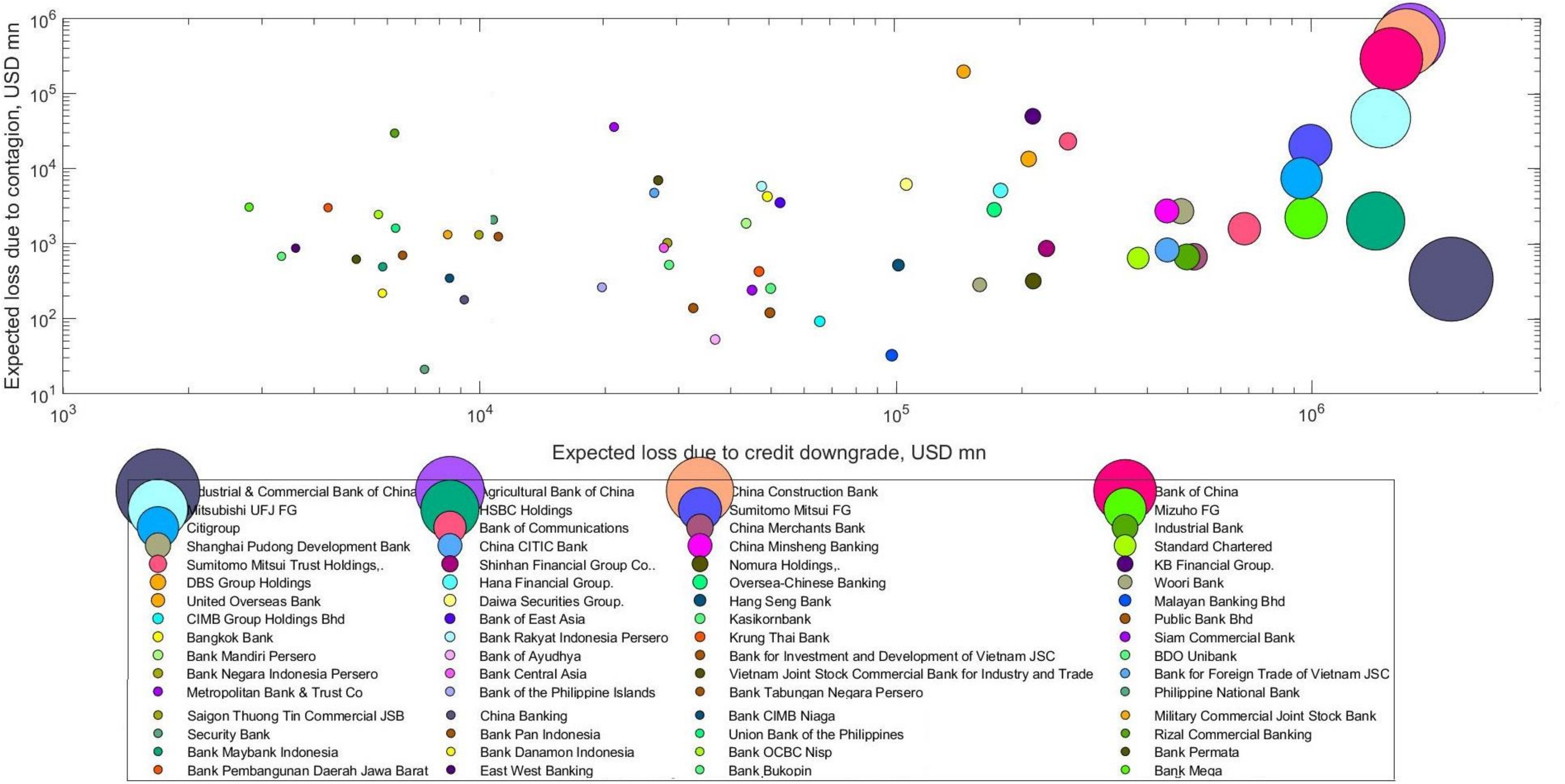
Figure 25. ASEAN+3: Incremental Expected Default Losses and Estimated "Collateral Damage" of Global and Domestic Systemically Important Banks from a 9,000 Basis Point Increase in Their Probabilities of Default



Sources: Credit Research Initiative of the National University of Singapore; and author's calculations.

Note: 10^0=1, 10^1=10, 10^2=100, 10^3=1,000, 10^4=10,000, 10^5=100,000, 10^6=1,000,000. Each node represents a G-SIB/D-SIB in the region. The size of the node reflects the relative size of the bank's liabilities. A 9,000 increase in the probability of default is equivalent to that of Lehman Brothers' when it failed during the global financial crisis.

Appendix I. The Covid Cycle

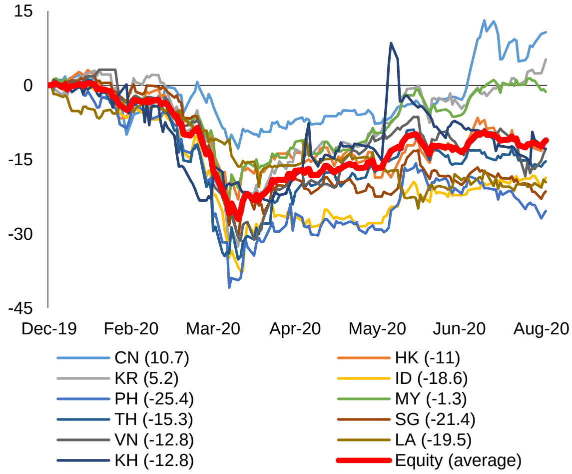
Appendix Figure 1. ASEAN+3 and Selected Economies: Covid Cycle Heatmap, as of August 4, 2020

Sources: Haver Analytics, sourced from John Hopkins University; and AMRO staff calculations.
Note: Based on [Hinojales, Oeking, and Ong (2020a)](). Minor outbreaks classified as outbreaks in the bottom 75th percentile of a country's 7-day average daily new cases.

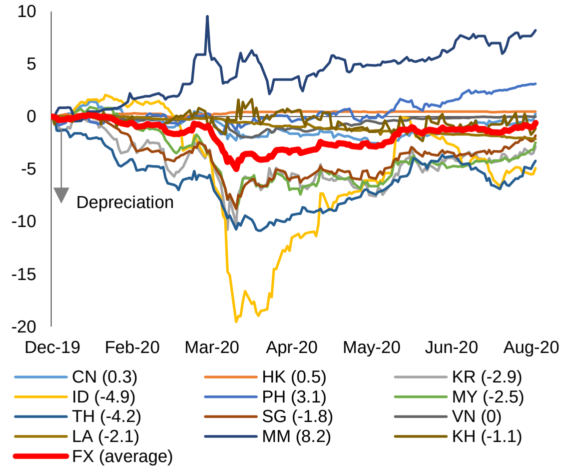
Appendix II. Financial Market Developments in the ASEAN+3 Region

Appendix Figure 2. ASEAN+3: Financial Market Performance

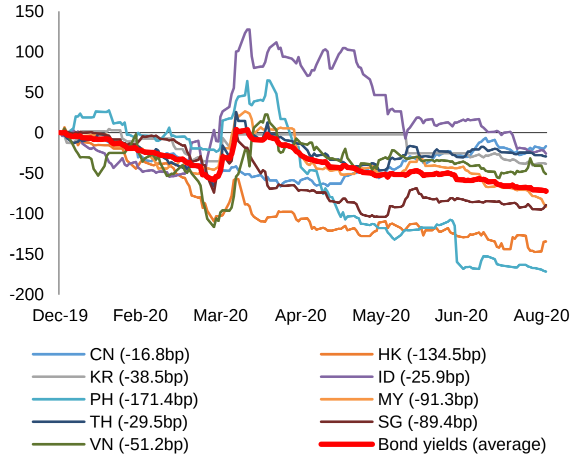
Equities
(Percent, January 1, 2020 = 0)



Exchange Rates per US dollar
(Percent, January 1, 2020 = 0)

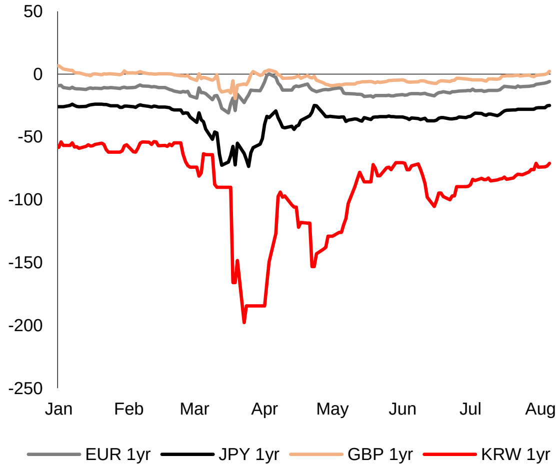


10-Year Government Bonds
(Basis points)



Sources: Haver analytics; and AMRO staff calculations.

US Dollar Cross Currency Basis, 2020
(Basis points)



Sources: Bloomberg; and AMRO staff calculations.
Note: yr = year.

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