OCBC TREASURY RESEARCH OCBC 2020 GLOBAL OUTLOOK





2020 2H Global Outlook: The world has changed in a twinkling of an eye with the Covid-19 pandemic.

Selena Ling Head of Research & Strategy +65 6530 4887 LingSSSelena@ocbc.com A long, long time ago, in a galaxy not so far away, the crystal ball looked much rosier at the end of 2019 and 2020 was seen as a year of hope, namely hope that the US-China trade relationship would improve with the signing of a Phase 1 trade deal, and the global economy could get on with life. However, that dream was quickly dashed with the emergence of the Covid-19 virus. With the Covid-19 pandemic upending international travel, many countries entered into nationwide lockdowns, and policymakers and central bankers scrambled to throw everything they could including the kitchen sink to stem the bleeding in financial markets and shore up business and consumer confidence and jobs as a global recession loomed. In the span of a couple of months, life has dramatically changed with masks and hand-washing being de riguer, with employees adjusting to working from home, students to home based learning, and online shopping and contactless delivery being the new norm. For businesses, the Covid-induced disruptions to global supply chains and a digital online business model have been a clarion call.

Race to the bottom, but essentially a short and sharp recession?

To illustrate the seismic shift in economic expectations, the IMF has downgraded its 2020 global growth forecast from +3% to -3% yoy while the World Bank tips a worse 5.2% contraction. Not to be outdone, the OECD sees global economic activity contracting by 6% in 2020 but warned that a second infection wave before year-end could see world output plummet 7.6% with a return to lockdowns and it could take between 2 to 5 years to recover the income loss. As Covid-19 cases continued to spread in the first quarter of 2020, containment measures had also escalated both globally and within Asia.

While the lockdowns and draconian social distancing measures may have succeeded in slowing the virus spread and possibly the death toll as well, nevertheless, the economic toll has been equally painful. Most major economies including the US and the Eurozone are now staring recession in the face. China is also expected to see growth sink into low single-digit range this year with the National People's Congress abandoning a specific growth target for 2020. Even Indonesia may barely keep its head above water this year as Covid-19 cases mount - note that its total number of cases has overtaken Singapore as the highest in Southeast Asia, which suggests that the Covid-19 curve has not yet peaked and the economic ramifications will follow. The Asian Development Bank has downgraded its developing Asian growth forecast to just 0.1% for 2020, the lowest since 1961, before rebounding to 6.2% in 2021 but largely due to a very



low base. Still, some central banks have attempted to pass the baton from monetary stimulus to fiscal stimulus, with Fed chair Powell also hinting at such a need.

Still significant Covid-related uncertainties remain.

To be sure, there is great uncertainty about both the duration and severity of the Covid-19 pandemic, and if there would be second or even third waves of infections which may prompt governments to reinstitute lockdowns again and curb economic activity. China is widely seen as the First-in and First-out of the Covid crisis, with 1Q20 marking the trough, but the recent cases emerging in Beijing point to a possible second wave. The fact that this comes when mobility trends suggest that people and car movements are gradually resuming with the lifting of lockdowns, this may cast a shadow on the recovery trajectory for the second half of 2020. On balance, the recovery path may not be linear and hence the ongoing debate about whether it will be V-shaped or U-shaped or even swoosh-shaped may be disingenuous and be better characterised as fits and starts. A game-changer, of course, will be the rapid development of a Covid-19 vaccine which will lay the foundation for the growth stabilization and recovery theme to gain traction. In the interim, the sequencing of the lifting of the lockdowns and containment measures do matter, as the recent market swings illustrate the risk sentiment fragility of pushing the risk-on rally further.

Adding to the volatile mix is the geopolitical uncertainties, ranging from the US-China blame game, some minor tiffs as Eurozone and Australia harden their stance against China, and the latest skirmishes between the two Koreas and China-India. With the wax and wane of US-China trade and tech war, Hong Kong appeared to be caught in the crossfire with the proposal to implement the national security law there which prompted the Trump administration to threaten to withdraw Hong Kong's special trading status. With the upcoming US elections on 3 November, noise levels are likely to escalate, especially with the recent market scrutiny of Trump's handling of the Covid crisis and also the George Floyd unrest. On balance, geopolitical event risks come and go and market typically takes them in their stride despite short-term blips, so they may exacerbate market volatility in the short-term, they rarely are long-term game-changers.

Investors are walking on a tightrope of fear and greed, but the equity bounce has been fast and furious.

Hopes of a faster and smoother transition to a post-Covid recovery story with planned re-openings have buoyed markets in the second quarter of 2020. Notably, our FX sentiment index which spiked in late March has pulled back into marginally risk-on territory. While the financial markets, especially the equity market, may reflect a V-shaped recovery, this is largely supported by the unprecedented monetary policy easing and ample liquidity provision by global central banks. The FOMC has essentially pledged to keep its zero interest rate policy through 2022 by not even thinking about thinking of hiking rates, while not ruling out the option of yield curve control (YCC) as a policy tool but continues to draw the line against negative interest rates for now. The European Central Bank (ECB) also recently expanded its asset purchase program by another EUR600 billion to ward off downside risks amid what would be an unprecedented contraction in 2020. The Bank of Japan (BOJ) also lifted its special lending program cap from JPY75 trillion to JPY110 trillion and committed to ultralow interest rates into 2023. The Bank of



England (BOE) remains dovish amid protracted Brexit negotiations with European leaders amid a deep recession and just expanded its bond purchase program by GBP100billion further after having earlier cut its benchmark interest rate to a record 0.1%, whilst not ruling out other options including negative rates.

Policy support remains forthcoming as most central banks remain cautious to outright dovish.

In Asia, central banks are not lagging behind in terms of monetary policy accommodation either. PBOC has unleashed the full arsenal of monetary and fiscal policy ammunition to first combat the Covid-19 healthcare crisis and also the economic downturn, with the latest salvo being a 14-day reverse repo rate cut. Elsewhere, several Asian central banks have been more proactive in intervening in the currency market, providing liquidity to alleviate any potential credit crunch in the initial period and also increasingly to stabilise the bond market. Bank Indonesia has cut rates for the third time this year, while Bank Negara Malaysia had earlier surprised market with a 50bps cut to 2% in early May amid the costly Movement Control Order (MCO). For Singapore, the Monetary Authority of Singapore had previously eased its trade-weighted exchange rate policy twice in October 2019 and March 2020 and with the S\$NEER slope set at zero appreciation, there may be less impetus for another easing move for now and MAS remains in wait-and-see mode until the next scheduled policy review in October 2020. With central bankers on cautious autopilot mode, the concern is where there is restricted policy space going forward should there be future Covid infection waves and/or future unexpected shocks. Nevertheless, we do advocate a keep calm and carry on approach to staying invested in markets, but do not get too carried away with the current euphoria as the rally may not sustain in a linear path.

Fiscal prudence cast out of the window for now.

Fiscal prudence priorities appear to have been put aside for now as governments focus on fighting the worst Covid-19 outcomes. The question remains if rating agencies will give a free pass for now due to the overwhelming concerns about the deep scarring from Covid-19 on the business and consumer confidence. The recent sovereign rating changes were India's rating downgrade by Moody's to Baa3 on 1 June and Hong Kong's rating downgrade by Fitch from AA to AA- on 20 April.

Beyond the short-term, as economies move into the recovery phase, then unprecedented monetary and fiscal policy accommodation sets the stage for inflation to potentially make a comeback and put pressure on yield curves to steepen in the medium term. There was a recent scare with the 10-year UST bond yield breaking out of its 0.6%-0.8% range to near the 1% handle, partly on concerns that the upcoming round of fiscal stimulus in the US of \$1 trillion would raise the deficit-to-GDP ratio further. While the bond bears appear to have backed off for now with the Fed's commitment to stay any rate hikes through 2022, what the rest of the year or even 2021 would bring may be a different story altogether. The fact remains that the Fed has ballooned its balance sheet to a record in excess of \$6 trillion. The Treasury department has also made known its intention to make the 20-year bond a benchmark issue through regular issues. The OECD tips the US budget deficit to rise to 6% of GDP with debt growing by \$17 trillion.

OCBC 2020 GLOBAL OUTLOOK



As a separate example, Malaysia's fiscal deficit is likely to widen to nearly double at 6.7% of GDP, requiring the debt-to-GDP to cross the 55% limit as well which requires parliamentary approval. Singapore is also unique in that despite spending up to \$100 billion equivalent to 20% of GDP in four budgets over four months, it requires a draw of \$52 billion past reserves but do not require additional bond issuance to finance it even though the fiscal deficit also balloons to a record 15.4% of GDP. MAS managing director Ravi Menon has warned that rising debt worldwide will likely be the biggest problem in the aftermath of the Covid-19 pandemic. If the Covid-19 situation is not contained, debt will continue to grow and credit quality will deteriorate and credit risks will start to mount. Once the loan moratoriums and forbearance end, there could be more corporate distress, and increased deterioration in credit quality could prompt ratings downgrade. So is a steepening bias may be inevitable? The jury is still out. For now, stay safe and stay invested.



GDP Growth Rates

% CHANGE YOY	2018	2019	2020F	2021F	2022F
US	2.9	2.3	-6.5	5.2	3.5
Euro-zone	2.3	1.6	-8.7	5.2	3.3
Japan	0.3	0.7	-4.4	2.3	1.0
United Kingdom	1.3	1.4	-8.7	5.0	3.5
New Zealand	3.2	2.2	-5.0	5.3	2.6
Australia	2.7	1.8	-3.3	3.2	3.4
China	6.7	6.1	2.9	5.9	5.6
Hong Kong	2.9	-1.2	-5.0	3.8	2.1
Taiwan	2.7	2.7	1.5	2.5	2.6
Indonesia	5.2	5	0.4	5.2	5.2
Malaysia	4.7	4.3	-1.0	4.2	4.3
Philippines	6.2	5.9	-4.5	7.4	6.0
Singapore	3.4	0.7	-5.5	4.0	3.0
South Korea	2.7	2	-0.3	3.0	3.0
Thailand	4.2	2.4	-6.0	3.3	3.0
Myanmar	6.4	6.5	1.8	7.5	6.5
Vietnam	7.1	7.0	2.7	7.0	6.5

Source: Bloomberg, CEIC. IMF, OCBC Bank Estimates



Inflation Rates

% CHANGE YOY	2018	2019	2020F	2021F	2022F
US	2.4	1.8	0.8	1.5	1.8
Euro-zone	2.2	2.0	0.3	0.8	1.3
Japan	1.0	0.5	-0.5	0.2	0.6
United Kingdom	2.5	1.8	0.8	1.5	1.5
New Zealand	1.6	1.6	1.3	1.5	1.8
Australia	1.9	1.6	0.7	1.2	1.6
China	2.1	2.9	2.1	2.4	2.5
Hong Kong	2.4	2.9	1.6	2.0	1.9
Taiwan	1.5	0.5	0.3	0.7	1.0
Indonesia	3.3	2.8	1.0	3.2	3.0
Malaysia	1.0	0.7	-1.0	1.5	2.0
Philippines	5.2	2.5	2.2	2.8	3.0
Singapore	0.4	0.6	-0.4	1.2	1.5
South Korea	1.5	0.4	0.2	0.9	1.2
Thailand	1.1	0.7	-1.3	0.7	1.0
Myanmar	5.9	8.6	6.2	6.3	6.0
Vietnam	3.5	2.8	3.0	3.2	3.5

Source: Bloomberg, CEIC. IMF, OCBC Bank Estimates



Central Bank Policy Rates

BENCHMARK RATE %	2018	2019	2020F	2021F	2022F
US Fed Funds Rate	2.50	1.75	0.25	0.25	0.75
ECB Deposit Facility Rate	-0.40	-0.50	-0.50	-0.50	-0.50
BOJ Overnight Rate	-0.10	-0.10	-0.10	-0.10	-0.10
BOE Base Rate	0.75	0.75	0.10	0.10	0.25
RBNZ Cash Rate	1.75	1.00	0.25	0.25	0.50
RBA Cash Target Rate	1.50	0.75	0.25	0.25	0.50
China 1-Year LPR	4.31	4.15	3.50	3.40	3.30
CBRC Discount Rate	1.38	1.38	1.00	1.00	1.25
Hong Kong Base Rate	2.75	2.00	0.50	0.50	1.00
BI Reference Rate	6.00	5.00	4.00	4.50	4.75
BNM Overnight Rate	3.25	3.00	2.00	2.25	2.50
BSP Overnight Reverse Repo	4.75	4.00	2.25	2.50	2.50
Singapore 3-Month SIBOR	1.89	1.77	0.45	0.70	0.87
BOK Target Overnight Call	1.75	1.25	0.25	0.50	1.00
BOT Repurchase Rate	1.75	1.25	0.25	0.50	1.00

Source: Bloomberg, CEIC. IMF, OCBC Bank Estimates



Contents

<u>China:</u> No Growth Target Does Not Mean No Growth	9
Hong Kong: Bumpy Road to Recovery	12
Indonesia: Waiting for the Plateau	18
Macau: Vulnerable to External Shock	23
Malaysia: Some Bright Spots	27
Myanmar: Still an Expansion	34
Philippines: Philippines Shows No Country is Immune to Covid-19 Impacts	37
Singapore: Emerging from Dark Clouds?	40
South Korea: Slack Labour Market to Prompt More Covid-19 Fiscal and Monetary Support	47
Taiwan: Positive Growth is Still Likely	50
Thailand: Regional Growth Laggard	55
<u>Vietnam:</u> Growth Prospects Remain Robust	58
Thematic Report: Which Sectors Can Ride Out Covid-19 Better?	62
Thematic Report: Global Supply Chain Changes Post-Pandemic	65
Thematic Report: Caught in the Crossfire	70
Thematic Report: Resilience of Electronics Supply Chain is a Legacy of Covid-19	76
Thematic Report: Covid-19 Routes to Normalcy	80

Tommy Xie Dongming Economist +65 6530 7256 xied@ocbc.com

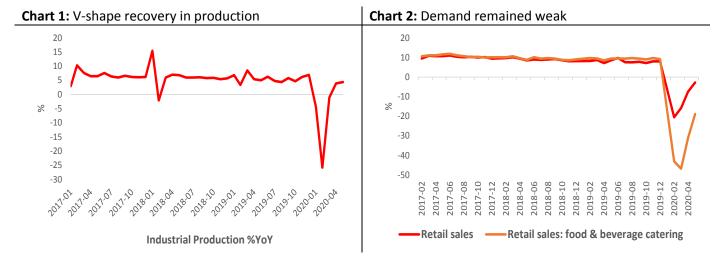


No Growth Target Does Not Mean No Growth

- China's production has staged a nice V-shape recovery but demand remained weak. Net export is expected to be more supportive though the sustainability of recent rebound of export growth is questionable.
- We revise down our 2Q GDP forecast to 0.6% yoy from 2.1% yoy.
- China still prefers a more targeted policy response. A "Whatever it takes" approach does not fit into China's cautious narrative.
- Pandemic and US-China tension will hold the key for China's second half outlook.
- A 2% growth is still a feasible target for 2020. We pencil in 2.9% growth for China in 2020 in our base line scenario with a wider range of 1.6%-3.6% pending on the development of Covid-19 as well as the US-China relationship.

The Chinese economy contracted by 6.8% yoy, its first contraction since the end of cold war. On a sequential basis, the economy contracted by 9.8% from 4Q 2019. The contraction in the first quarter was mainly the result of a supply-side shock due to movement control of people and an unprecedented lockdown.

China's industry sector has staged a nice V-shape recovery in March and April thanks to the orderly resumption of production. However, the demand side recovery has remained weak. The pent-up demand failed to materialize as consumers remained cautious due to the uncertain economic outlook amid the global pandemic and falling income. China's retail sales in May continued to underperform market expectations. The recent Covid-19 outbreak in Beijing may weigh down consumption sentiments again, which may mire Retail Sales growth in negative growth territory.





China's goods trade surplus unexpectedly hit a record high of US\$62 billion in May as a result of resilient export growth and weak import growth. Despite weak regional export growth and falling new export orders in May, China's export managed to grow by 1.4% yoy in RMB term. The rebound of exports growth was probably due to two factors. First, it was due to higher demand for Chinese medical equipment to fight the Covid-19 pandemic. From 1 March to 31 May, China has exported 70.6 billion masks, 304 million PPEs, 115 million goggles, 96.7 thousand ventilators, 225 million test kits and 40.29 million infrared thermometers. Second, China may also have benefited from substitute demand from advanced economies as most of the economic activities in the advanced economies were shut down.

Although substitute demand may not be sustainable in the second half of 2020, we think it is strong enough to support the rebound of the economic growth in the second quarter. We expect net exports to be more supportive of growth. However, given a weaker than expected domestic demand, we revise our 2Q GDP forecast down to about 0.6% yoy from 2.1% yoy previously.

No growth target does not mean no growth

For the first time in many years, China did not set the specific growth target for 2020 due to uncertainty from the Covid-19 development and the global trade environment. Although China did not set its 2020 growth target, the Chinese government still set the quantified targets for various areas such as job market and fiscal policy. Should China achieve all its sub-targets such as unemployment rate and money supply growth, we think it is possible for Chinese economy to grow by at least 2% yoy in 2020.

Meanwhile, China has been running its decade-old longstanding target to double both the size of economy and income in 2020 from the levels in 2010. Against the backdrop of the unforeseen shock from the Covid-19 pandemic, it is almost impossible for China to meet its target to double the size of economy this year. However, the target to double income is still reachable as long as Chinese economy is able to grow by at least 1.75% yoy in 2020.

More targeted and innovative policy measures

Although the government report has reiterated to forcefully implement macro policies to keep businesses and employment stable, investors who bet on massive fiscal stimulus may be disappointed as China's current rescue package as a percentage of GDP is much smaller than the world's norm of 10%.

The Chinese government plans to increase its fiscal deficit by additional CNY 1 trillion to CNY3.76 trillion. Meanwhile, the local government special bond quota will also be increased by CNY1.6 trillion to CNY3.75 trillion while China will issue additional CNY1 trillion special treasury bond for Covid-19 control. Altogether, CNY3.6 trillion additional bond issuances are in the pipeline, which is equivalent to less than 4% of GDP.

Even after taking for last year's budget revenue shortfall and higher than expected budget expenditure into consideration, China's incremental fiscal expenditure this year will be less than CNY6.8 trillion, which is still less than 7% of GDP.

China



In addition, the latest Ministry of Finance meeting showed that China's policy makers remained cautious and they are not willing to create new problems in order to solve the existing problems. This is also in line with China's bottom line mentality highlighted in the National People's Congress (NPC), which shows that China is unlikely to pursue a "whatever it takes" stimulus approach.

On monetary policy, Premier Li Keqiang set the tone during his press conference for NPC closing remarks that China will not flood the economy with excessive liquidity, which will induce froth in the marketplace where some people may attempt to muddy the waters and fish for arbitrage.

As a result of a hawkish tone from Premier Li, China's yield curve has flattened since late May, led by rebound of short-term money market rates. The guessing game about PBoC's policy direction has been the source of recent market volatility in China's money and bond markets. Nevertheless, on a positive note, PBoC took firm steps to improve communication with the financial market. PBoC announced to roll over the maturing medium-term lending facility (MLF) on 15 June in early June. Meanwhile, the central bank also announced to bring forward the daily open market operation inquiry timing to reduce the distortion to the market. These may help cap the upside trend of China's risk-free rates.

Pandemic and US-China tension will hold the key

Against the backdrop of a balanced tone from China's policy makers, the pace of recovery in the second half of 2020 will mainly depend on two factors including the development of global pandemic and the evolving US-China relationship.

The recent Covid-19 outbreak in Beijing which is linked to its wholesale market showed that the second wave of transmission risk is real. Although we don't expect it to spiral out of control like what we saw in Wuhan in December 2019 due to an increasing awareness of the virus, the rise of individual social responsibility and the wide use of masks, the outbreak may weigh down the already weak domestic demand as people may further delay their travel or entertainment plans.

On the US-China relationship, the situation remained fluid as the bilateral relationship has been torn apart by four factors including the pandemic, trade deal, technology issue and Hong Kong issue. Although the market concern on the rollback of the phase one trade deal has eased after the US trade representative Lighthizer acknowledged China's commitment to the phase one deal, the risk still cannot be ruled out as we approach the US Presidential Election in November.

Overall, we think 2% GDP growth is still a feasible internal target for China in 2020. We pencil in 2.9% growth for China in 2020 in our base line scenario with a wider range of 1.6%-3.6%, pending on the development of Covid-19 as well as the US-China relationship.

OCBC TREASURY RESEARCH Hong Kong



Bumpy Road to Recovery

- While the economy was struggling to recover from last year's double whammy, it was hit hard again by the coronavirus outbreak. On a positive note, the worst may be over for the crippled economy, owing to global relaxation of restriction measures and a raft of local relief measures. However, the road to recovery will be a bumpy ride as pandemic uncertainty remains intact in the absence of effective vaccine. We pencil in a GDP contraction of 5% for 2020. Should Covid-19 pandemic last longer, it may inevitably have a long-term impact on the world including Hong Kong.
 - We are wary of the potential risks facing the economy, politics, society and fiscal health post pandemic. For the economy, the hardest-hit sectors including tourism, hospitality and transportation may find it hard to regain momentum. For politics, HK may remain a proxy battleground for US-China relationship. For the society, we are worried that Covid-19 will deepen income inequality. On fiscal health, the sharply shrinking reserves will call into question the ability of the government to support the rising healthcare expenditure and to fight a next recession.
 - While Hong Kong's future is fraught with potential risks, we still see opportunities lying ahead for the trade and financial sectors as regionalization, RMB internationalization and the opening up of China's financial market are set to accelerate post Covid-19. In face of a different world post-pandemic, the government may have to take action ahead of the curve to better seize the good opportunities and contain the potential risks.

The struggling economy suffered a second blow from Covid-19

While the economy was struggling to recover from last year's double whammy, it was hit hard again by the coronavirus outbreak. Due to the restriction measures, a wide range of industries including tourism, hospitality, retail, transportation and catering suffered a second blow while the construction sector took a fresh hit. Visitor arrivals dropped by 85.3% yoy while retail sales tumbled by 35.3% yoy during the first four months of this year. During the same period, the number of passengers and cargo handled by HK International Airport slid by 67.5% yoy and 11.8% yoy respectively. Exports and imports decreased by 8.2% yoy and 9.2% yoy respectively. As a result, unemployment worsened on a broad basis with jobless rate rising an over 15-year high of 5.9% in the three months through April. This translated into a souring of consumer sentiments. Due to the demand and supply shock, GDP contracted by a record 8.7% yoy in 1Q.

Carie Li Ruofan Economist +852 2852 5767

carierli@ocbcwh.com

Hong Kong



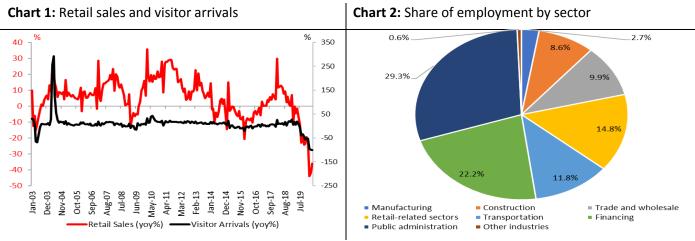
The worst may be over for the economy

On a positive note, the worst may be over for the crippled economy, owing to two favourable factors. First, restriction measures have been relaxed globally and look unlikely to tighten again any time soon. Second, the government has rolled out several rounds of relief measures to safeguard jobs and support the hard-hit companies and individuals with the amount totalling HK\$287.5 billion or about 10% of GDP. On the back of these two factors, Hong Kong's Purchasing Managers Index rebounded to a fourmonth high of 43.9 in May. Also, the sales of retail outlet such as food and goods in department stores which are mainly supported by local consumption decreased at a slower pace in April.

A bumpy road to recovery

However, the road to recovery will be a bumpy ride as pandemic uncertainty remains intact in the absence of an effective vaccine. We pencil in a contraction of 5% for 2020 GDP. Should Covid-19 pandemic last for longer, it may inevitably have long-term impact on the world including HK. We are wary of the potential risks facing the economy, politics, society and fiscal health post-pandemic.

For the economy, the hardest-hit sectors including tourism, hospitality and transportation may find it hard to regain momentum. For these sectors, higher hygiene standards may be required to prevent another novel coronavirus outbreak. As a result, travel and accommodation will likely become less affordable, especially to the lower income group who have been hit hard by the pandemic. Renewed social unrest post-pandemic will be another potential drag on the tourism, hospitality and transportation sectors. With these lower-end services sectors' outlook remaining clouded, we are concerned that their unemployment rate will stay elevated and continue to weigh on the local consumption which contributed to over 65% of total GDP.



Source: HK Census and Statistics Department, HK Tourism Board, OCBCWH



Hong Kong

For politics, HK may remain a proxy battleground for US-China relationship which turns more fluid following the coronavirus blame game. As US-China tension escalated and HK's social movements showed signs of resumption, China was prompted to draft the national security law for HK. In response to China's move, the US President and the Secretary of State may take action to revoke HK's special treatments and sanction Chinese and HK officials deemed responsible for HK's diminishing autonomy. Our base case is that the US imposes sanction on officials and firms and revoke HK's right to import American sensitive technologies but keep the rest of special treatments unchanged. If this is the case, the potential impact on HK may be limited. In the worst-case scenario, the US may cancel all of HK's special treatments. This could raise concerns about the sustainability of HK's status as the international financial centre and a key re-export port and in turn cause some disruption to its crucial financial and trade sectors.

For the society, we are worried that Covid-19 will deepen the income inequality which has been one of the catalyst for social movement. First, though labour market has been slackening on a broad basis amid the pandemic, the financial industry and public sector where wages are much higher have shown a milder increase in the unemployment than the manufacturing, construction as well as retail, accommodation and food services sectors. Due to the faltering outlook of the lower-end services sectors, the lower-income group who has been hit harder may remain unemployed or underemployed for some time. Second, flushed global liquidity may support HK's stock market and housing market to regain traction post crisis, making the rich wealthier and the poor worse off. Due to the rising income inequality and the prolonged political issues, social movements may reoccur from time to time. September's Legislative Council would be a potential trigger for another round of protests. This may in turn challenge the stability of HK's economy, financial market and livelihoods.

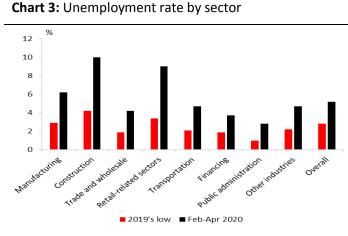
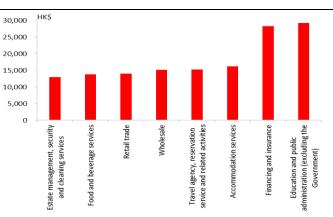


Chart 4: Median monthly wage by sector



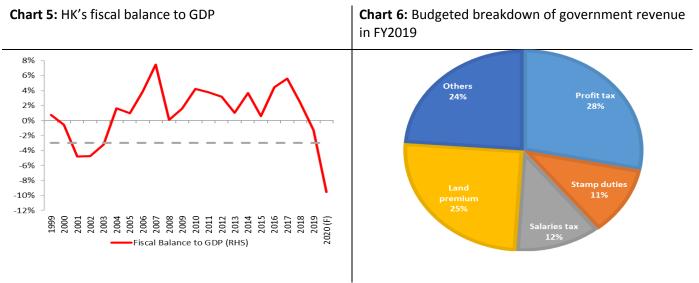
Source: HK Census and Statistics Department, OCBCWH

On fiscal health, the sharply shrinking reserves will call into question the ability of the government to support the rising healthcare expenditure and to fight the next recession. To combat the virus, the government has rolled out several rounds of relief measures. More is likely to come given the worsening unemployment and faltering growth outlook. As such, fiscal reserve for 2020/21 may eventually be lower than the government's



Hong Kong

estimate of HK\$800-900 billion or 28% of GDP. Further decrease of the reserves is likely in the medium term as the government foresees deficits of HK\$7.4 billion to HK\$17 billion for each fiscal year till 2024/25. Against this backdrop, the government will have to strengthen its fiscal condition, in order to support the expected increase in healthcare spending post Covid-19 and prepare for the next crisis. A revamp of the tax system which relies heavily on revenue from the cyclical real estate sector may be imminent. Some have suggested raising taxes on the rich, such as increasing the salary tax on the highest-income group (as salaries tax merely contributed around 10% of government revenue) and imposing tax on property asset appreciation as well as the large amount of stock dividends. This may help to boost revenue and, in the meantime, ease the income inequality. If we take Singapore as a reference, a sales tax may also be studied.



Source: Budget 2020/21, OCBCWH

Opportunities are still there for the trade and financial sectors

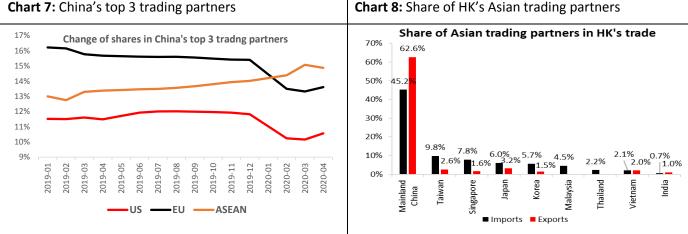
While HK's future is fraught with potential risks, we still see opportunities lying ahead of the trade and financial sectors.

First and foremost, trade sector may benefit from the expected acceleration of regionalization. As US-China trade war and Covid-19 pandemic have caused a big shock to the global supply chain, the trend of de-globalization is likely to prevail post the health crisis. Worse still, HK is under the risk of losing its special trading status as it has been caught in the crossfire of US-China tensions. Having said that, opportunities are still there for HK's trade sector to survive or even thrive post pandemic. Amid the de-globalization and pandemic, ASEAN has superseded EU as the largest trading partner of China. Going forward, trading activities within Asia are likely to grow further on the back of the booming regional demand. Even if China were to export less and import more in the longer term due to its economic reform, HK could still play its role as the key re-export port between China and the rest of Asia. Nine out of the ten main import partners and seven out of the ten major export partners are Asian countries which respectively took up 84% of total imports and 74.5% of the city's

OCBC TREASURY RESEARCH Hong Kong



total exports in April. Besides, HK may speed up collaboration with Shenzhen in high-tech manufacturing and in turn serve the growing demand across Asia. As a result, the logistics and transportation sector could continue to benefit from the long-term resilience of regional trade.



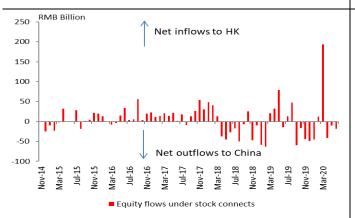
Source: HK Census and Statistics Department, Wind, OCBC, OCBCWH

Another bright spot post pandemic would be the financial sector as China is set to further open up its financial market to regain global trust. Lately, Chinese government relaxed the inbound capital control such as removing the quota limits for QFII and RQFII. Also, the PBOC rolled out measures to promote the financial integration of the Greater Bay Area such as crossborder trade and investments. In fact, northbound bond connect (trading volume rose by 220.4% yoy in 2019 and 214% yoy to RMB1.4 trillion in January to April) as well as the stock connect have seen increasingly strong cross-border flows.

On the other hand, HK's IPO market may continue to thrive as the HKEX is looking to shorten the IPO process to make the market more competitive. Meanwhile, due to the looming US-China financial war, Mainland companies may increasingly prefer to get listed in HK. Following Alibaba, JD.com and NetEast launched their second listing in HK during June. More second listings by the US-listed Chinese firms could be expected in the near term to bring in capital of over US\$10 billion.

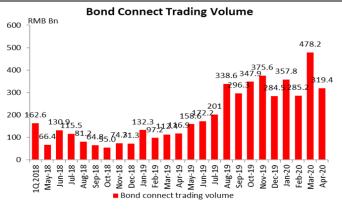
Hong Kong

Chart 9: Strong cross-border flows under stock connect



Source: Chinabondconnect, Bloomberg, OCBCWH

Chart 10: Active northbound trading of bond connect



In conclusion, post lifting of lockdowns, the economic recovery will likely be sluggish before there is any effective vaccine. Even if the health crisis has passed, we may need to adapt to a different world post pandemic. As such, the government may have to take action ahead of the curve to better seize the good opportunities and contain the potential risks.





Indonesia

Wellian Wiranto Economist +65 6530 6818 wellianwiranto@ocbc.com

Waiting for the Plateau

- Indonesia continues to battle upticks in coronavirus infections across the country, even as its regional peers appear to have at least gotten the first wave of infections under control.
- While in some ways, the recent pickup in cases may be attributable to the ramp-up in efforts to test and trace more, there are concerns that the patchy and reluctant lockdown measures – especially over the Eid holiday period – have contributed to the uptick.
- With the economic momentum already weakening rapidly even before the onset of the virus scare, downside risks are likely to prevail in the near term. We see growth at just 0.4% as a baseline, but negative 2020 growth cannot be ruled out altogether.
- The government has already been raising its fiscal deficit target in a bid to spend more to help cushion the blow, but the room to continue doing so is limited by foreign funding needs. To preserve the attractiveness of Indonesia's yield-differential, Bank Indonesia might be reluctant to cut policy rate much further from here.

Not alone in moving up

If we focus on high-frequency indicators that might shed some light on whether the Indonesian economy has started to exit from the deep freeze of the April-May period, things should be looking up. For one, judging from Apple Mobility data, residents in Jakarta are moving once again.

While still about one-third short of the degree of movement compared to early March, it has nonetheless marked a rapid bottoming in the last few weeks. In that aspect, Indonesia is following the path of fellow ASEAN economies, whereby as lockdown measures are relaxed, people are moving once more – signalling that economic momentum is at least ready to pick up once again.



Source: OCBC, Bloomberg.

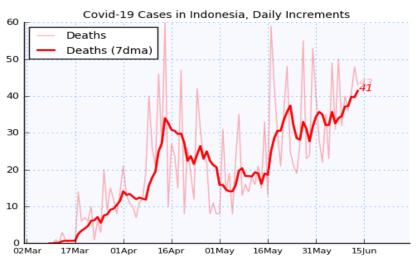


Indonesia

Unfortunately, unlike the cases for its regional peers, Indonesia's recovery in economic momentum, as proxied by the mobility data, comes at a time when its coronavirus infection counts have continued to pick up, whereas many fellow ASEAN countries have seen their cases plateaued. Indeed, the first few weeks of June alone saw multiple days in which the country registered over 1000 new cases per day, compared to around 520 on average in May.

While the uptick in cases is in some respect due to an increase in testing efforts by the authorities, it has also come at a time when the country appears to have failed to stem the large inter-province movement of people during the Eid holiday season. Despite the official restrictions on travel, for instance, an estimated 1.6 million Indonesians have managed to get out of the capital city, Jakarta, alone, for example – sparking concerns that the large-scale movement of people would seed new clusters across the vast country.

Moreover, for all the recent increase in testing efforts, Indonesia still ranks well behind the others in this aspect. Out of a country with a population of 270 million, Indonesia has tested just under 500,000 people. As a proportion of its population, Philippines has tested 2.5 times more than Indonesia has, while Thailand's proportion is even greater at 3.7 times. Hence, as much as more cases have been picked up by the recent effort to increase testing, there may yet be a lot more undetected cases in Indonesia than elsewhere.



Source: OCBC, Bloomberg

On top of that, Indonesia has had the misfortune of having a pickup in the death rates owing to the virus as well, which does not speak well of its healthcare sector's preparedness. The daily death counts have breached 40 casualties per day in mid-June and may crawl up further if the already-challenged hospitals become more swamped by newly detected cases.



Indonesia

Hence, while the government has offered some sensible words on how the pace of economic reopening will depend on data, the recent move to allow more sectors to operate once more – albeit with reduced capacity – can only be seen as a double-edged sword. Until the cases of new infections and deaths start to plateau, any new spurt in economic momentum can only come with a big caveat of unbearable potential sudden pullback again.

Battling on

Against the backdrop of what is likely to be a long fight against the Covid-19 outbreak, the government has launched a IDR405tn fiscal stimulus package on March 31st. Within that, as much as IDR75tn (USD4.6bn) has been allocated to ramp up the healthcare response, including equipping the 132 hospitals across the country that are dedicated for the treatment of Covid-19 patients.

Meanwhile, up to IDR110tn was slated to bolster the social safety net. While it includes cash handouts to the poor, there have been some concerns about some other aspects of the package. These include provisions within the so-called pre-employment card for up to IDR1mn (USD64) for online classes that are meant to improve the employment prospects for those who have lost their jobs. Critics have highlighted, however, that most of the classes – with some featuring courses on how to make puddings and "cheesy chicken croquette" – are not exactly resume-boosters.

All in all, given the unprecedented scale of the challenges, in coming up with effective ways to stimulate the economy and protect livelihoods, teething problems are to be expected and remedies to be found in time.

Still, with economic momentum decelerating, speed is important.

Details on a IDR150tn "recovery program" that is part of the stimulus, for example, have yet to be announced fully after the initial announcement, however. Still, some measures such as credit restructuring provisions and a guarantee fund for working loans to SMEs have been rolled out. For businesses that are suffering through this crisis, and run into issues either servicing their current loans or obtaining new ones, every day of delay may make the difference between survival and bankruptcy.

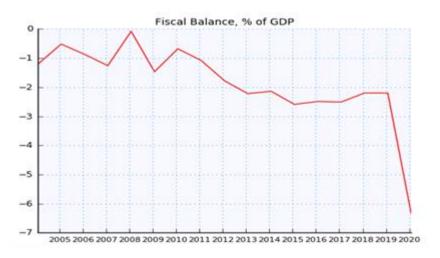
No cap in name, but in practice

Given the urgency of the situation, it is no surprise then that there have been more and more talks about how the Indonesian government would have to add even more stimulus. For instance, the Chamber of Commerce highlighted a need for extra spending of up to IDR1600tn, to bolster the economy.

To us, it is crucial to make sure the infrastructure of stimulus disbursement is well in place first before we even talk about another ramp-up in potential expenditure, given that the existing package has yet to be rolled out fully yet. The cash handouts programs to help poorer households tide through a difficult period have been bedevilled by a lack of comprehensive database for the target recipients, for instance.



Indonesia



Source: OCBC, Bloomberg

Moreover, there is the obvious impact on fiscal deficit if spending is ramped up further. Even for the current package alone, Indonesia has had to suspend its long-time sentiment anchor of capping the fiscal deficit at 3% of GDP, in order to allow room for the new target of 5.07% of GDP. Since the initial announcement, the deficit target has ballooned further to 6.37% of GDP. Even if spending is ramped up by just half of the amount touted by the Chamber of Commerce, deficit would have to go up to as much as 10% of GDP, for instance.

At the end of the day, even if there is no more deficit cap by name for the next three years, the need to source for financing never goes away and this imposes a cap in practice on just how much and how quickly deficit can go up.

While the authorities have successfully raised USD4.3bn in global bonds issuance in May, including via a new 50-year bond, investors' confidence is always flighty and is in large part dependent on global factors beyond Indonesia's control.

Moreover, even though Bank Indonesia is now allowed to purchase government bonds in the primary market to help fund the deficit expansion, the mechanism remains new. While the authorities have repeatedly emphasized that the central bank would only step in when market mechanism runs into issues, and that its participation would be capped at 25% for conventional bonds and 30% for sukuk bonds in non-competitive bids to limit its effects on pricing, the longer term impact of such primary purchases remain uncertain especially for emerging markets. While the notion of inflation would appear to be a distant phenomenon given the demand crunch, it would nevertheless feature in investors' minds.

Hence, until market gets familiarized with both higher deficit levels planned by the Ministry of Finance and the primary purchase to partially fund the extra deficit by the central bank, it is perhaps best to adopt a gingerly attitude.

This may be especially so given that the ratings agencies are watching this space closely. Already, in April, even though S&P has affirmed its BBB rating on Indonesia's sovereign, it has nonetheless slapped a negative outlook on



Indonesia

it. To be sure, the timeline alluded to in the S&P's statement – saying how it may lower the rating if growth suffers "over the next two years" – does not signal any immediate downgrade. However, it should serve as a reminder of the need to keep to at least some stricture of fiscal prudence despite the need to cushion the economy at this point.

Hence, given the need to anchor market sentiment amid tectonic shifts in the deficit size and financing mechanism, we reckon that Bank Indonesia will be increasingly gingerly in its interest rate policy. While it has cut its policy rate by 25bps in the June MPC meeting and may well cut again in the coming months if the global situation allows for it, we reckon that it is unlikely to bring rate lower than 4.0% in our baseline scenario. This is in order to preserve yield differential to help secure foreign fund inflows that will help to finance the increase in budget deficit. If growth momentum looks to be shakier than expected, BI may be compelled to trim rate further, but doing so would come at an increasing risk in terms of fund flows and exchange rate stability.

Our baseline expectation is for growth to average 0.4% in 2020, Q2 growth may contract by as much as 4%, but should mark the trough. As economic activities start to resume in June and into H2, we are still holding out the hope that Indonesia can escape a technical recession, with 0.5% growth in Q3. Should global and domestic conditions fail to pick up more favourably, however, growth of as low as -1% for the whole of 2020 cannot be ruled out altogether.



Macau

Carie Li Ruofan Economist +852 2852 5767 carierli@ocbcwh.com

Vulnerable to External Shock

- The economy contracted by record 48.7% yoy in 1Q due to overreliance on external demand which has been damaged by the Covid-19 pandemic.
- GDP contraction is expected to deepen in 2Q. Gaming and tourism have remained in an almost standstill amid stronger restriction measures starting from late March. As such, despite strong stimulus and the strong government expenditure, any rebound in fixed investments or local consumption may be outweighed by the expected sharper decrease in the exports of services.
- Moving into 2H, the worse may be over once travel restrictions are lifted. However, any recovery of the gaming and tourism sectors will likely be subdued given the persistent external demand shock amid a global recession and pandemic uncertainty. The strong local currency could also remain a drag on the exports of services.
- With Covid-19 outbreak being almost contained domestically, local demand seems to have rebounded thanks to strong relief measures. However, a wave of layoffs and bankruptcies looks likely in 2H, which may constrain the rebound in domestic demand.
- In a nutshell, we pencil in a record economic contraction of about 25% for 2020. On a positive note, the government's strong fiscal health may be able to help weather the big economic blow

Economy remains vulnerable to the external shock

Macau has been striving to diversify the economy away from an overreliance on the gaming sector following China's crackdown on corruption. That said, the booming tourism sector on the back of new infrastructure and a wave of mega entertainment project openings did not help to shield the gambling hub from external shock.

With tourism and gaming being the two pillar industries of the city, the economy has remained vulnerable to external headwinds as net exports of services contributed to about 70% of total GDP. Last year, GDP contracted for the first time since 2016 by 4.7% yoy amid China's economic slowdown and HK's social unrest. This year, a much deeper economic contraction looks inevitable due to the Covid-19 pandemic and the global recession story.

Economic contraction may have deepened in 2Q

Gaming revenue and total visitor arrivals decreased by 60% yoy and 68.9% yoy respectively in 1Q. As a result, exports of gaming services and other tourism services tumbled by 61.5% yoy and 63.9% yoy respectively. With exports of services plunging by record 60% yoy, GDP growth contracted by a record 48.7% yoy during the first quarter.

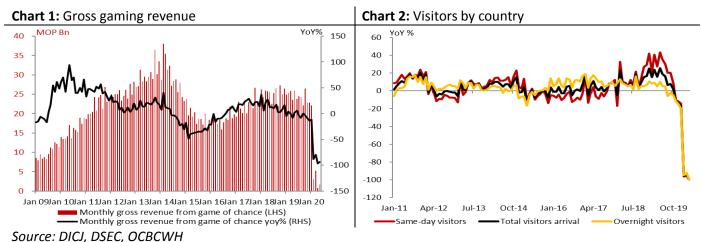


Macau

Even though the gaming centres re-opened and containment measures were relaxed globally, the worst is not yet over for these two sectors. With Macau and Mainland China imposing strong travel restrictions from late March, potential tourists and gamblers were kept further away from the gambling hub. In April, total visitor arrivals decreased by a record 99.7% yoy after falling 68.9% yoy during the first quarter. During the same month, the gross gaming revenue plunged by record 96.8% yoy to MOP754 million, less than the daily average of MOP799 million last year.

On a positive note, fixed investments (-37.2% yoy in 1Q) and private consumption (falling by record 15.2% yoy in 1Q) may have dropped at a slower pace in 2Q on the back of resumption of local economic activities since March and the strong relief measures. Also, government expenditure (+5% yoy) may have remained resilient owing to the fiscal stimulus. Specifically, Macau government announced a second round of relief measures to combat the virus, totalling MOP10 billion which aims to save jobs, tide over hard-hit sectors and revive local consumption.

Having said that, the expectedly sharper decrease in exports of services may offset the strong government expenditure and any rebound in fixed investments or local consumption. As such, we expect the economic contraction to deepen in the second quarter of this year.



Recovery may remain sluggish in 2H

Moving into the second half of this year, the economic contraction is expected to moderate. Still, recovery will take time. Once the travel restrictions are eased or lifted, the worst could be over for both gaming and tourism. The governments of Hong Kong and Macau seem to have been working on forming a "Travel Bubble" between the two cities.

However, any recovery of the gaming and tourism sectors will likely be subdued given persistent external demand shock on global recession and pandemic uncertainty. The strong local currency, which is indirectly pegged with the USD, could also remain a drag on the exports of services.

Even if the pandemic has passed, we are still cautious about the tourism outlook due to two reasons. First, in the absence of new mega entertainment projects, high accommodation cost and the relatively strong MOP may deter re-visitation, especially given the prolonged external shock. Second, travelling and accommodation may become less affordable with

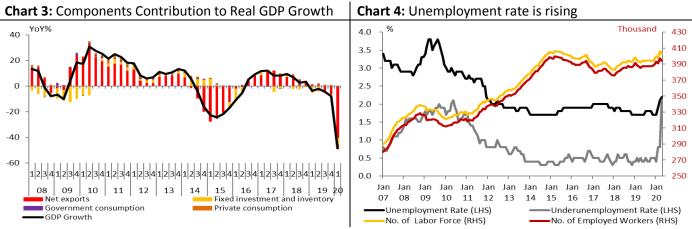


Macau

the cost increasing amid the requirement of higher hygiene standard postpandemic.

Should tourism remain subdued, gaming sector is unlikely to stand out as gaming sector's mass-market (revenue dropped by 59.9% yoy in 1Q) relies on casual gamblers. Worse still, policy risks regarding anti-corruption and China's economic slowdown may continue to weigh down high-roller demand (VIP revenue slid by 60.2% yoy in 1Q). As such, gross gaming revenue (-73.7% yoy during the first five months) is expected to drop over 50% yoy in 2020.

Internally, with unemployment rate soaring to the highest since 2011 to 2.2%, the looming job uncertainty will likely constrain the rebound of local consumption. On the other hand, as relief measures are set to fade with time, some struggling SMEs may eventually go bust. The expected increase in bankruptcies could also hinder the growth of fixed investments.



Source: DSEC, OCBCWH

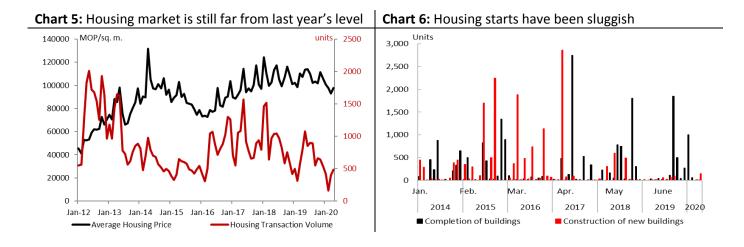
The housing market is not an exception

During this difficult time, the housing market is not an exception either. Despite a recent rebound on the back of several favourable factors including the rally in risk sentiment, property developers' sweeteners, strong pent-up demand as well as the persistent undersupply of homes, both transaction volume and average housing price were still way below last year's levels. Approved residential mortgage loans also decreased for the sixth consecutive month by 20.5% yoy to MOP2.01 billion in April.

Going forward, the factors mentioned above are expected to sustain and keep supporting the rebound in the housing market. However, the upside of the housing market will likely be capped by several unfavourable factors. First, the heightened job uncertainty may dent housing demand especially from the potential local first-home buyers who represented 82.8% of total local homebuyers. Second, housing control measures and lower rental yield could remain a drag on speculative demand. The share of local homebuyers holding more than one residential property in total local homebuyers remained low at 3.17% in April. Third, homeowners such as businessmen who are in urgent need of cashflow may sell the flat at deep discounted price. In conclusion, we expect average housing price (-7.3% YTD) will drop by up to 10% yoy this year.

OCBC TREASURY RESEARCH Macau





In conclusion, the economic contraction may have bottomed out in 2Q as Macau is working together with HK on plans to relax the travel restrictions. However, any recovery going forward will likely be slow especially given the persistent external demand shock. As such, we tip a record GDP contraction of 25% yoy for 2020.

On a positive note, the government's strong fiscal health may be able to help weather the big economic blow. In particular, though government estimates that budget deficit would widen to MOP48.95 billion (over 10% of GDP) for this fiscal year, it will not have much impact on the city's sizeable basic reserve and excess reserves which totalled MOP579.4 billion, which is equivalent to 133% of GDP. OCBC TREASURY RESEARCH Malaysia



Wellian Wiranto Economist +65 6530 6818 wellianwiranto@ocbc.com

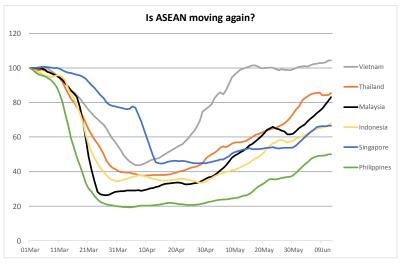
Some Bright Spots

- The good news is that the pain inflicted by the decisive MCO restriction orders in mid-May seems to have worked in curtailing the spread of the coronavirus in Malaysia. While there have been periods of uptick, the cases appear to have been largely driven by proactive testing of migrant worker communities. Moreover, death rate has been thankfully low.
- As the country has transitioned into Conditional MCO and now Recovery MCO, restrictions have been eased further and Malaysia is now well on the road to a new semblance of normalcy. Hence, in our baseline scenario, Q2 should mark a bottom. Growth will not be smooth, but the economy has a fighting chance to shrink by "only" 1% this year.
- Still, the large degree of uncertainties ahead would also naturally translate to multiple ways in which the growth trajectory would go. There are concerns, in particular, that political uncertainties may tick up considerably again, which may threaten to nip any recovery in the bud.

Moving along again

Malaysia exited the most stringent of its MCO restriction orders in early May. And it shows very clearly, in the mobility data, that is.

An index of ASEAN mobility – which we created using Apple driving directions request data to compare whether residents in major cities across the region have been moving versus the start of March this year – signals that Malaysians started to recover their mobility earnestly throughout the month of May. Indeed, by mid-June, the index has moved up to 83, which means that Kuala Lumpur residents might be just 17% or so less mobile now compared to before the worst of the virus outbreak hit.



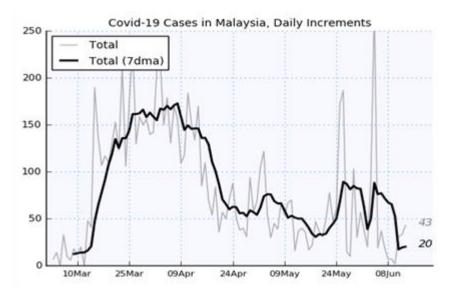
Source: OCBC, Apple. Note: Series reflect the trend for driving direction requests for capital cities in respective ASEAN countries (except Ho Chi Minh



for Vietnam). Numbers are derived from Apple's Mobility Trends Reports, shown on a rolling weekly average basis, and indexed to 100 as of March 1st, 2020

Better control

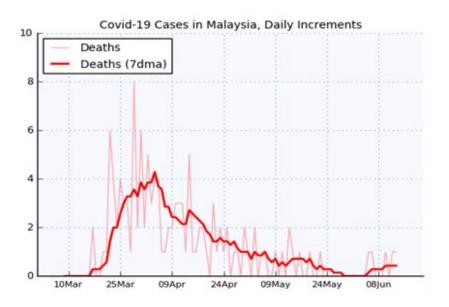
In and of its own, the return of mobility is a good sign that shows that the economy can at least start on its long journey towards recovery. Moreover, the increase in people movement has occurred at a time when Covid-19 cases in Malaysia have come largely under control thus far, limiting concerns of potential virus resurgence.



To be sure, there have been days in late May whereby the daily increments shot past 200, but these have been largely been driven by proactive testing of the migrant worker communities by the authorities. Moreover, as a testament to the quality and availability of the healthcare provisions, Malaysia has also managed to keep the fatality rate at a low level so far.



Malaysia



Source: OCBC, Bloomberg

Hope for a trough

As much as we are heartened by the relative good news that the outbreak has been largely contained so far and that economic activities appear to be resuming again, the reality is that it will be a long while before the Malaysian economy can get close to regaining its full potential for a while.

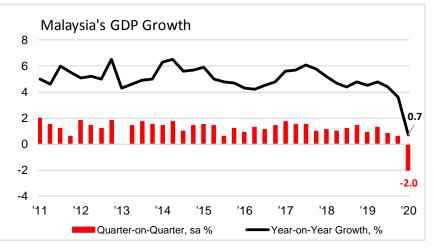
For one, the official growth data that we have thus far - only for Q1 - pointed to a new, much more sombre reality for 2020 as a whole.

To be sure, in normal times, if Malaysia were to announce a GDP data showing anything below 2% or even 3% year-on-year (yoy) growth, we would have assumed there is an error somewhere. As a sign of how drastic all our viewpoints have changed, Q1's 0.7% print had – rather wistfully – brought us some cheers.

While it is easily the lowest yoy print since late 2009, you would hear many thinking, "Well, at least it's still positive!". If nothing else, it tells you how subdued the expectations were. In a broad range of forecast expectations of between -4.2% to 1%, we had belonged to the lower end at -4% due to concerns about consumption growth, especially, amid the multitude of negative news flow hitting Malaysia during the period.



Malaysia

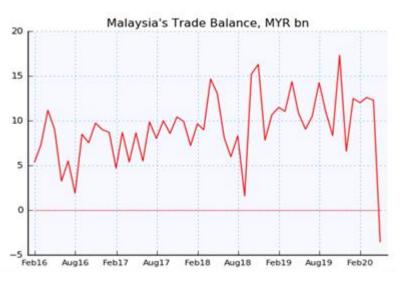


Source: CEIC, Bloomberg, OCBC

To be sure, the momentum did weaken considerably in Q1. In seasonallyadjusted sequential terms, growth shrank by 2% in Q1. This is the first time it has dipped into an outright contraction mode in at least a decade.

Looking at some of the sub-components of the economy, any sense of joy would look terribly out of place, as well.

For one, the exports segment bore the hallmarks of damage from supply chain disruption from the beginning of Q1 and an unforgiving combination of production shutdown and demand evaporation in the later part. It shrank by 7.1% yoy, and essentially lopped off a chunky 4.7 percentage points from the headline growth. Despite some shrinkage in imports to balance things out, net exports nonetheless showed a hefty 37% yoy drop in Q1. The outlook ahead in the near term would be challenging still. Already, Malaysia saw its trade balance shrinking to deficit level in April. While we cautioned against over-reacting to that – because it was driven largely by a one-off increase in the import of LNG carriers – exports itself did surprise on the low side as well.



Source: OCBC, CEIC, Bloomberg

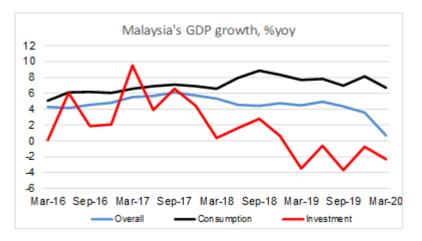


Still, our baseline expectation is for some resumption in global trade activities as major export destinations open up their economies again in the coming months. That should help Malaysia's exports to eke out some recovery as well. The recent uptick in the PMI print for Malaysia should be taken as an encouraging sign of production recovering some grounds too.



Source: OCBC, CEIC, Bloomberg

Meanwhile, investment activities shrank considerably too, at -2.3% yoy growth rate in Q1. While it is not a tremendous drop from the -2.1% average for 2019, it has nonetheless been a drag in Q1, and can only be even more so in Q2 and possibly beyond given the greater challenges.

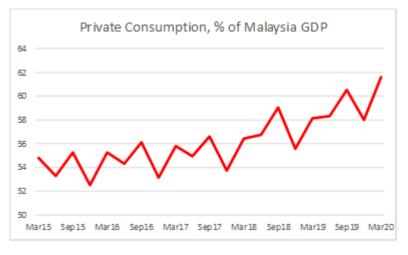


Source: OCBC, CEIC, Bloomberg

Compared to the other components, it must be said that private consumption has held up remarkably well. In yoy terms, it grew by 6.7% in Q1. While that is obviously a downtick from the 7.6% we saw on average in 2019, the print jumps out more in its resilient strength than anything else, given the backdrop of economic and health uncertainties.



Going forward, given the increasing share that private consumption commands – at nearly 62% now compared to 57% and 59% averages of the last two years – it is both heartening to see its lingering strength in Q1 and concerning to think about its prospects in Q2. For one, if the bulk of the private consumption strength has been due to frontloaded purchases ahead of the MCO imposition in mid-March, that obviously leaves a gap in Q2.



Source: OCBC, CEIC, Bloomberg.

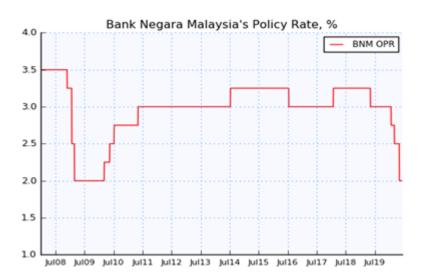
No less importantly, there is also the much poorer employment prospects to contend with now versus just a few months ago. Already, the statistics office noted a pickup in unemployment rate in March to 3.9%, compared to 3.3% in February. April would have most likely see it cross above 4%, portending a much less benign landscape of purchasing power, especially against the structural backdrop of high household indebtedness.

In short, as much as we take comfort in the resilience in Q1's GDP data overall and the private consumption print specifically, we are concerned about Q2, especially the earlier part of the quarter when the MCO was at its strictest.

Already, BNM has noted that it expects an outright year-on-year contraction in Q2. Our baseline thinking is that the economy may see a contraction as deep as 6% yoy during the period, before eking out some gains in H2 to allow it to post growth of -1% for the year.

Having implemented a 100bps rate cut this year, we see Bank Negara keeping its powder dry and leaves the OPR unchanged at 2%, if such baseline scenario holds. If there is any indication that growth momentum would suffer more deeply despite the easing of the MCO, BNM would not be hesitant to cut rate further below the now-historic low to 1.5%.





Source: OCBC, CEIC, Bloomberg

This is important to note given that, even though the baseline scenario we have in mind is already fairly subdued, the outlook still comes with tons of caveats, unfortunately. This would include no more need for any re-imposition of restriction orders after the existing one runs its course.

With political temperature rising yet again ahead of the re-convening of the Parliament on July 13th, any further uptick will inadvertently hurt the path towards recovery, as well. On the global front, there is also the base assumption that the major economies can recover enough grounds without endangering second waves of outbreaks that threaten to shut them all once more. If these downside scenarios take place against the best of hopes, Malaysia's GDP might shrink by as much 3% this year. Investment activities which have already been suffering will be particularly at risk.





Still an Expansion

- Myanmar has done well in combating the virus, but its recovery ahead would be dependent on the global recovery.
- The economic damage has likely bottomed, and the economy is showing signs of recovery
- An expansion is still expected for 2020, with a full rebound likely to happen in 2021.

Emerging from the pandemic

Myanmar has emerged relatively unscathed from the pandemic, with official number of cases and death toll standing at 242 and six respectively for a population of more than 54 million people. It was an impressive feat considering they have relatively lesser resources to contain the virus, and a widespread outbreak would have done tremendous damage to the economy. In response to the pandemic, the government imposed a lockdown to curb the spread of the virus, which was successful but it damaged the economy further as economic activities came to a halt. Nevertheless, with the lockdown lifted, Myanmar is on its road to recovery although the pace of recovery would be dependent on the recovery of other economies.

Showing signs of stabilisation

Myanmar's growth story is largely dependent on the global growth story, as the country's robust economic growth over recent years had been largely reliant on external factors such as FDI and international trade. However, the pandemic has negatively impacted international economic activity as economies around the world went into a standstill due to the lockdowns imposed.

The manufacturing PMI suffered a sharp fall to a record low of 29 in April as lockdowns were imposed in Myanmar and other countries. However, the worst is likely to be over as the PMI print rebounded to 38.9 in May, suggesting that the decline in the manufacturing sector has bottomed out as lockdown restrictions are eased and economies start to open up.

Recovery plan

The government has unveiled an economic plan called the Covid-19 Economic Response Plan (CERP) in response to the economic damage caused by the pandemic. The CERP aims to boost Myanmar's GDP growth for next year to 6%, with the following plans:

- 1) Boosting the economy through monetary stimulus.
- 2) Improving investment, trade and banking sectors to ease the impact on the private sector.
- 3) Helping labourers and workers.
- 4) Helping households.
- 5) Promoting innovative products and platforms.

Myanmar

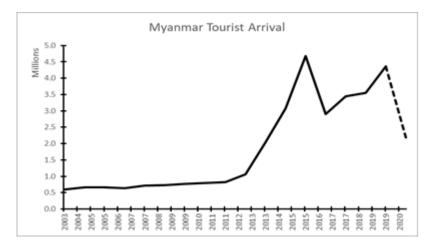


6) Strengthening the healthcare system.

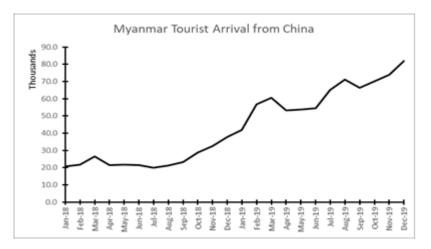
7) Improve access to Covid-19 response financing.

Although the global economy is expected to rebound in 2H, it is not expected to be back operating at pre-Covid levels so quickly. The CERP allows the government to boost domestic economy which would aid the economic recovery in 2H while putting Myanmar in a good position to achieve its growth target for 2021.

Tourism as growth driver



The tourism sector in Myanmar has boomed in recent years, due to an increasing amount of investments made in the tourism sector and a rising number of Chinese tourists. It suffered a sharp fall in tourist arrivals in 2016 as the country was gripped by issues revolving around the Rohingya crisis but started to pick up again after 2017. With an increasingly buoyant tourism sector, the government now sees tourism as one of the major drivers of economic growth in the coming years. The fall in tourism this year is expected to weigh negatively on the economy, with the government expecting total tourist arrivals to fall by 50% in 2020.



Nevertheless, one bright spot would be the sharp rise in Chinese tourists in recent years. Tourists from China make up a large proportion of Myanmar's tourist arrivals, reaching a peak of 344,268 in 2019, a 75% yoy increase as Myanmar eased visa restrictions for China tourists. As China becomes the



Myanmar

first country to emerge from the pandemic and with both China and Myanmar making plans to resume international flights, Chinese tourists to Myanmar may help soften the blow to the tourism industry.

Full recovery in 2021

Barring a second wave of infections across the globe, Myanmar's economy is expected to recover in 2H along with the global economy. Despite the Great Lockdown Recession globally, the IMF still expects Myanmar's economy to record positive growth for 2020 at 1.8%, which is one of the few positive GDP growth expected in the region. In 2021, a global rebound from the economic devastation, coupled with the CERP implemented by the government, would likely see Myanmar return to its robust growth rate of 7-8%.

OCBC TREASURY RESEARCH Philippines

Howie Lee Economist +65 6530 1778 howielee@ocbc.com

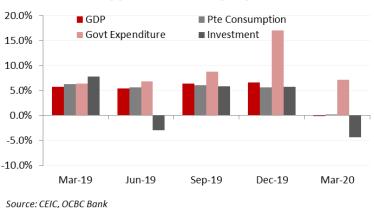


Philippines Shows No Country is Immune to Covid-19 Impacts

- Q1 GDP growth declined 0.2% yoy, led lower by private consumption and investment at 0.2% yoy and -4.3% yoy respectively.
- The country's twin deficit status is set to deter investment flows, dampening fixed capital growth.
- Government spending is likely to accelerate in H2, but a full year recession is unlikely to be averted.
- We see full year 2020 GDP growth at -4.5% yoy.

Fixed capital formation shrinks as twin deficit looms again

The main drag to Philippines' GDP growth in Q1 2020 was the lack of investments, which had contracted 4.3% yoy. This would be the steepest contraction for the investment segment of GDP since Q1 2011, but will likely pale in comparison for what is expected to be an even sharper slowdown in Q2. The country's twin deficit status (fiscal and trade), combined with the Duterte administration running one of the world's longest Covid-19 lockdown programme, is likely to deter investment fund flows into the country in the near term.



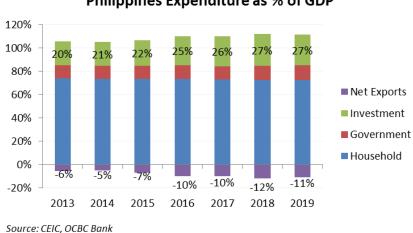
Philippines Growth by Expenditure

Source: Bloomberg, CEIC, OCBC Bank

The investment expenditure has been an increasingly important component to the country's growth under President Duterte's fiscal-led economic transformation. Under former President Benigno Aquino III, growth in fixed capital formation constituted 22% of GDP in his last year of office. Under President Duterte, that has since grown to 27%. This has resulted in the increase in the country's trade deficit, which has grown larger from 7% to 11% of GDP in the same period, as more goods have to be imported to support the infrastructure building programs. The lack of investments – particularly FDIs – is likely to hold back growth in the country.

OCBC TREASURY RESEARCH Philippines

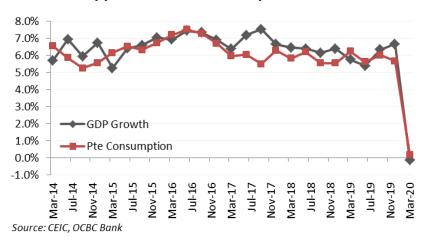




Philippines Expenditure as % of GDP

Consumption may contract in Q2, but is likely to rebound by Q3

The main driver of Philippines' economic growth has consistently been private consumption, which typically contributes almost three-quarters to the country's GDP. Private expenditure tends to be the most stable relative to the other GDP expenditure segments of government spending, investments and net exports, given individual consumption patterns are unlikely to swing materially from quarter to quarter. Household consumption has, in the past five years, grown predictably at a pace of 5.5-6.0% yoy per quarter. This stable pillar of Philippines' economic growth, however, buckled under the weight of Covid-19, posting a mere growth of 0.2% yoy in Q1. Into Q2, we expect a contraction in consumption, although we expect a quick rebound back to growth by Q3.



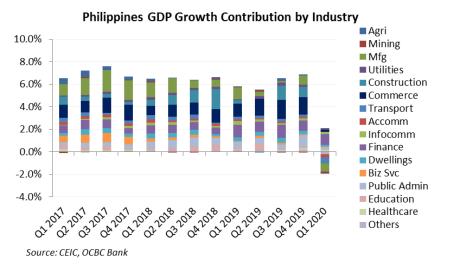
Philippines GDP vs Consumption Growth YoY

We estimate 2020 GDP growth at -4.5% yoy, Q2 growth at -11.0% yoy

The lockdown is undoubtedly highly disruptive to the economy. The prolonged lockdown measures on Metro Manila and other cities such as Luzon and Davao are expected to weigh heavily on growth in Q2. We expect the economy to contract by 11% yoy in Q2, with private consumption very likely to dip into negative growth territory. The manufacturing, transport and accommodation sectors have all contracted last guarter. We expect the



likes of professional business services, commerce, dwellings and education to join the ranks in Q2, while the finance sector might come close to posting zero growth in the same quarter.



We expect government spending to accelerate in H2, although it is still unclear if a dedicated Covid-19 package is forthcoming. More resources from the current budget might be redirected to support industries that are facing the highest solvency stress from the lockdown measures. Remittances are expected to slow sharply through the rest of the year as income worldwide takes a hit from a lack of consumption and rising unemployment.

BSP to shoulder burden of supporting growth impetus for now

With fiscal support measures suffering from execution issues, the BSP will likely have to shoulder most of the growth impulse for now. At time of writing, the BSP's benchmark interest rate still stands at 2.75%. We expect a reduction of 25bp in the June meeting and possibly once more in Q3 to eventually bring the key rate to 2.25%. The RRR is expected to be reduced more aggressively as well and might be further cut by 200bp to 10% in Q3.

OCBC TREASURY RESEARCH Singapore



Emerging from Dark Clouds?

Selena Ling

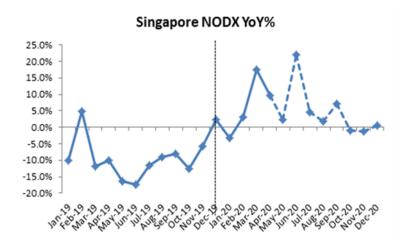
Head of Research and Strategy +65 6530 4887 LingSSSelena@ocbc.com

- The Covid-19 pandemic has exacted a heavy toll on the Singapore economy, both in terms of growth with a deep recession anticipated, but also in terms of the unprecedented two month Circuit Breaker and the record \$93 billion fiscal stimulus frontloaded into four budgets in four months.
- Is the worst over? Covid-19 infections, both in the foreign worker population in dormitories and also in the local community transmissions, have stabilized. Manufacturing also performed better than expected due to the biomedical cluster, especially pharmaceuticals, which benefited from the global Covid-fuelled demand. However, services and construction may bear the brunt of the plummeting demand, but the phased re-opening of the Singapore economy from 2 June should bode for modestly better days ahead.
- The question is whether the recovery trajectory will be V- or U-shaped. If the re-opening of the Singapore economy is accelerated in terms of transiting to Phase 2 and allow all economic activities to resume, this could give growth momentum in the second half of 2020 a fillip. This does not mean that Singapore can escape a recession in 2020, but the severity of the contraction could be less at around -5% to -6% versus the deeper end of the official range at -7%. This also means that the hurdle for additional fiscal and monetary policy stimulus is also higher from here.

At the end of 2019, Covid-19 was already a dark cloud that we highlighted,

but the devastation it wrought on both the global and domestic economy in the healthcare and economic arenas. Despite the rapid increase in domestic Covid-19 confirmed cases from late February-March, 1Q20 GDP growth was actually revised higher from the initial flash estimates of -2.2% yoy (-10.6% qoq saar) to -0.7% yoy (-4.7% qoq saar), mainly due to the upside surprise from industrial production in March, aided by pharmaceuticals that benefited from the temporary global shortage for medical products due to Covid-19. The official 2020 GDP growth forecast had been downgraded three times to -4% to -7%, from -1% to -4% previously. IESingapore also cut its 2020 NODX forecast to -1% to -4%.

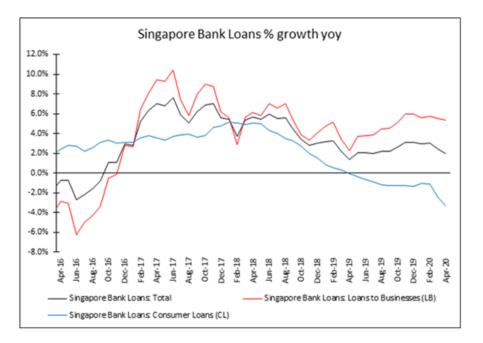




2Q20 likely marks the bottom for growth, as the two month Circuit Breaker meant that most economic activities except defined "essentials" went into "cold storage" mode. As workers were defaulted to work from home and students embark on home-based learning, domestic demand is likely to be suppressed with the exception of online shopping, food and grocery delivery e-entertainment. Notably, retail sales slumped 40.5% yoy -31.7% mom sa) in April, but the online component rose to 17.8% of total retail sales. Food & beverage sales plummeted by 53% yoy (-38.8% mom sa) in April, but the online component surged to 39.2% as all F&B establishments had to shift to a takeaway or delivery model only. Bank loans also eased to 2.0% yoy (slowest since July 2019) due to the drag from consumer loans which contacted for the 12th straight month by 3.3% yoy in April (worst print from at least 2005). In contrast, business loans still grew albeit a tad slower at 5.4% yoy, partly due to the Budget initiatives to help SMEs with credit access.







With the start of the re-opening of the Singapore economy from 2 June, market players are keenly on the lookout for green shoots. The manufacturing and electronics PMIs both rebounded to 46.8 and 46.2 respectively in May from April lows of 44.7 and 42.8, notwithstanding the extension of the Circuit Breaker period to 1 June. While the June manufacturing PMIs are likely to register a further improvement as factories reopen with the lifting of the lockdowns globally and also the Circuit Breaker on 2 June domestically, it may still take more than one month to recovery to expansion territory (50 level). One concern is that the supplier deliveries indices for both the domestic manufacturing and electronics PMIs actually slid further to 49.0 and 47.6 respectively in May, which may point to global supply chain disruptions not fully resolving yet and could potentially weigh on the resumption of factories from June onwards.

The earlier business expectations survey showed that a net 56% of manufacturers had anticipated a deterioration in the outlook between April to September 2020, citing the weakened external demand and supply chain disruptions due to lockdowns and border closures in many countries due to the Covid-19 outbreak. This is the lowest reading since GFC at -57% in December 2008. The most bleak were transport engineering (-79% due to the sharp oil price plunge that has hit the marine & offshore engineering projects and the slump in global aviation industry due to travel restrictions), followed by electronics (-75% due to dampened demand and supply chain disruptions), biomedical manufacturing (-67%), general manufacturing (-47% due to curtailment of local construction activities due to the Circuit Breaker period), chemicals (-25% due to pressure on refining and petrochemical margins and disruptions to feedstock supply and product deliveries for specialties and other chemicals), with the least gloomy being precision engineering (-12%). In terms of the 2Q20 output, a net 32% of manufacturers expect lower output, led by transport engineering (-64%), general manufacturing (-51%), even biomedical manufacturing (-44%). The



biomedical segment is likely an anomaly as pharmaceuticals and medtech had actually benefited from increased demand due to the Covid-19 pandemic, but still saw supply disruptions for raw materials in the pharmaceutical segment and the medtech segment is also anticipating manpower constraints in the next three months.

However, the services sector is clearly bearing the brunt of the Covid-19 induced Circuit Breaker as personal consumption of goods and services slumped. The Singapore whole economy PMI slid further from 28.1 in April to a fresh low of 27.1 in May as output and demand plummeted and businesses shut for the two month Circuit Breaker. Business confidence had slumped to a record low with around 90% of companies registering a lower intake of new work as overseas demand sank. In particular, purchasing activity fell at a record pace and employment fell to its weakest since February, albeit it was a tad better than April.

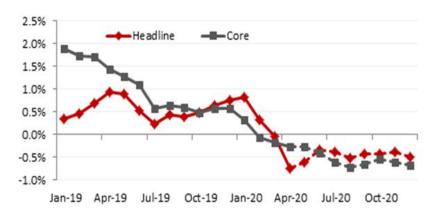
For now, services sentiments remain cautious as the domestic demand shock has been significant. A net 58% of firms surveyed anticipated a less favourable outlook for April-September 2020, compared to just 2% three months ago. This is also worse than the GFC when the previous record low was -53% in December 2008. In particular, a net 53% of services firms tip lower operating receipts and a net 24% of firms tip lower employment as well. Notably, all the services industries expect business activity to decline for 2Q-3Q, but the most bearish unsurprisingly are those hospitality-related segments like accommodation (-97%) due to the global travel restrictions, particularly for air transport, as well as food & beverage services (-96%) and retail trade (-84%) due to the implementation of the Circuit Breaker and the expectation that demand may not recover immediately even after the Circuit Breaker period. Note many of the other services industries were also very cautious, financial & insurance (-72% due to the adverse impact arising from the Covid-19 pandemic), real estate (-63%, due to limitations of virtual show flats for instance), recreation, community & personal services (-58% due to social distancing measures), business services (-55%), wholesale trade (-53%), transport & storage (-52% due to low demand for petroleum and products).

The cumulative amount of fiscal stimulus to-date has been staggering at **\$92.9b** which is equivalent to nearly 20% of GDP. This robust response is seen as a decisive move to support the S'pore economy over the Covid-19 outbreak and the Circuit Breaker period as well as preparing for the phased re-opening. Notably, the four budgets in four months also mark the second draw on Past Reserves given the unprecedented crisis posed by Covid-19. President Halimah has given her in-principle support for a total draw on Past Reserves of \$52bn this year. The overall budget deficit for FY2020 will hit \$74.3mn (15.4% of GDP), the largest since Singapore's independence. An additional \$13bn has been set aside for the Contingencies Funds to lubricate future funding of the current Covid-19 fiscal responses and future crises. All this points to the Covid-19 pandemic which is still evolving and while policymakers have thrown significant resources at the Covid-19 challenge and while it may not be the end of the road yet, nevertheless, the bar to further tapping of fiscal stimulus may be higher from here.



One highlight is the SGUnited Jobs and Skills Package which is looking to create 100,000 job opportunities to help buffer the expected fall out in the domestic job market due to the Covid-19 pandemic as well as minimize the accompanying structural shocks from the accelerated transition to digital platforms and e-commerce. The Jobs Support Scheme (JSS) has been extended and enhanced with all eligible firms receiving an additional 1 month of payout till August 2020. For firms that are not allowed to re-open on 1 June, they will continue to receive wage support of 75% until August 2020 or when they are allowed to re-open. In addition, the Ministry of Law is proposing a bill next week that mandates landlords in commercial properties to provide 4 months of rental relief to SMEs. The government will provide cash grants through property owners to offset this cost. Foreign worker levy waivers and rebates will also be extended for businesses that face deferred re-openings, while the planned hike in CPF contribution for senior workers will also be deferred for one year to 1 January 2022. As such, the overall and resident unemployment rates may only rise to 3-3.5% and 3.5-4.0% respectively by end-2020.

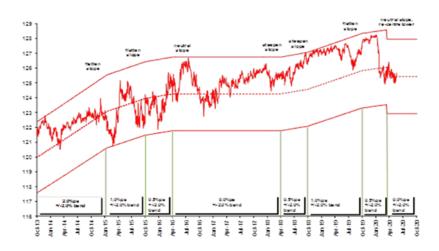
Monetary policy playing a complementary role but is not currently in the driver's seat for mitigating the downside risks. To recap, MAS had twice flattened the S\$NEER slope to neutral over the course of October 2019 and March 2020 policy meetings. The 30 March MAS statement suggests that fiscal policy will do the heavy lifting and monetary policy will focus on managing liquidity conditions and currency volatility. With the S\$NEER relatively anchored around its parity band, there is little need or urgency for another monetary policy easing at this juncture, much less an off-cycle easing. The subdued domestic demand picture due to the Circuit Breaker is already apparent, but the recent crude oil price slump is probably notable and may add to downward pressure for energy-related items in the CPI basket. Our headline and core inflation forecasts are -0.4% and -0.6% yoy respectively.



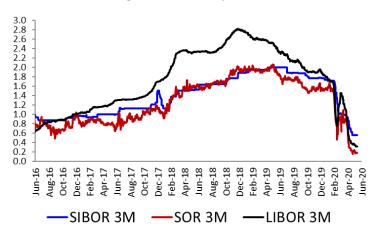
Singapore CPI Forecasts, YoY%

Source: CEIC, OCBC Estimates





SGD short-term interest rates are expected to stay subdued for longer amid soft domestic economic fundamentals and as USD LIBOR rates remain anchored by Fed chair Powell's emphasis that "we're not even thinking about raising rates". At the 11 June FOMC, the Fed affirmed it would purchase assets at "at least at the current pace" of around \$80 billion a month for UST and \$40b for MBS and the dot plot reflected all but two members with no intention of rate hikes until 2023. As such, we tip the 3month SIBOR and SOR at 0.45% and 0.10% respectively at end-2020. Since SOR is a synthetic rate which uses LIBOR in its computation, the very shortdated SOR fixings may briefly turn negative as was the case in 2011 and more recently for the overnight SOR at -0.57% on 26 March and the 1month SOR at -0.06% on 20 May respectively, but they have both reverted to positive territory at 0.06% and 0.09% as of 11 June. However, learning from that 2011 experience, most mortgages linked to SOR are likely floored at zero, so the impact on the man on the street may be limited. Since end-March, USD funding conditions have improved significantly with the Fed's extension of USD swap lines to various central banks, as well as the resumption of USD credit issuance markets. Onshore liquidity conditions have also become more ample, as reflected by the aggressive yield decline in MAS bill auction. At this juncture, it is premature to assume the Fed cutting US interest rates to negative territory soon, barring a further deterioration in the global Covid-19 pandemic and US economy.





Light at the end of the tunnel even as Singapore's 2Q20 GDP growth is still expected to contract by around 15% yoy. This will be worse than the -0.7% yoy seen in 1Q20, but the manufacturing sector looks like it will escape a full-year contraction for 2020 despite the Covid-19 demand shock and supply chain disruptions, albeit this is also coming off from a relatively low growth base of-1.0% yoy for 2019. However, the construction and services sectors will still contract this year. Total bank loans may also expand at a modest 2.0% yoy this year, but could have been worse if not for the Budget measures to ensure continued credit access for SMEs. Additional fiscal and monetary policy from here may see a higher bar until we see clearer signs of stabilization or a faltering in the recovery trajectory in the second half of 2020.

South Korea



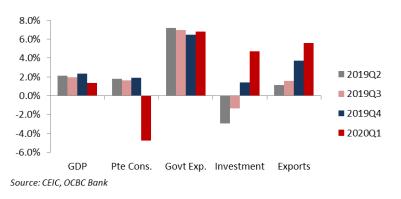
Slack Labour Market to Prompt More Covid-19 Fiscal and Monetary Support

- South Korea's private consumption contracted yoy in Q1, a harbinger of the drawdown that is expected in Q2.
- The country's ability to contain its Covid-19 has allowed minimal disruptions to the electronics supply chain.
- Slack labour market conditions in May are likely to prompt more support from the Moon administration and the BOK.
- We estimate South Korea might post a marginal full-year GDP contraction of 0.4% yoy.

Private consumption contracted in Q1 and is likely to contract in Q2

South Korea has managed to so far avoid placing its economy in lockdown, choosing to control the Covid-19 outbreak in its country via mass testing and calls to practise good hygiene and social distancing. That move appears to have reaped dividends with the surge in cases stabilising from an increase of almost 13,000 in March to 988 in April and 729 in May. Q1 GDP growth rose 1.4% yoy from 2.3% yoy in the previous quarter. Private consumption growth at -4.8% yoy was likely inevitable in 1Q20 given the initial widespread outbreak of Covid-19 in the country. Other expenditure segments posted growth in Q1, with investments coming in at 4.7% yoy, the fastest growth since Q1 2018.

Consumption is expected to recover in Q2, but still likely to face a contraction. Investments are also expected to falter into negative growth territory, as is net exports. Government expenditure – which now totals 270 trillion won – is expected to negate the contractions from private spending and fixed capital formation.



South Korea GDP Expenditure Components, YoY Growth

Economist +65 6530 1778 howielee@ocbc.com

Howie Lee

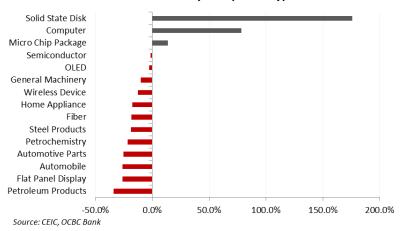
South Korea



Electronics provide a platform for export recovery in Q3

Although South Korea never went into a full lockdown, its dependency on exports would mean it is not immune to the lockdowns in other countries. More specifically, the lockdown in the US and Europe during the months of April and May has resulted in a decline in South Korean exports. This results in a lower wealth effect among consumers, and coupled with the slack in the labour market, we do not expect private expenditure to return to pre-Covid-19 levels despite it lifting restrictions in mid-April.

Electronics exports, however, have held up reasonably strongly in South Korea. This is a trend observed in other countries such as Singapore and Thailand, which posted only slight contractions in electronics production relative to other sectors. Solid state disks (SSDs), computers and microchips posted year-to-date gains so far; the other end of the scale are mostly non-electronics related exports such as petroleum products, automobile, automotive parts and steel products. The minimal disruption in the electronics chain – a huge component of South Korea's GDP – is likely to provide the bedrock for exports to recover in Q3.



South Korea 2020 Exports (Jan-May) YoY %

Slack labour market

May's unemployment rate rose to 4.5%, its highest in more than ten years. Simultaneously, jobless claims recipients unsurprisingly rose to a record high in April. Services-related employment bore the largest brunt, while manufacturing also continued its long-term decline in hired workers. The slack in the labour market has increased the calls for more policy support, which duly came in June when the Moon administration announced the third supplementary budget of 35.5 trillion won. At 0.50%, we think the BoK might step in once more with a 25bp rate cut to bring its benchmark rate to a record low 0.25% as it bids to keep the costs of funding low for the various support programmes. This call is more dovish than the overwhelming consensus that the benchmark rate has now hit a trough at 0.50%. Minutes from the May monetary policy meeting, however, shows members are currently split on whether to further reduce the benchmark rate and to implement government bond purchases, suggesting further monetary easing should not be completely ruled out yet.





2020 GDP growth estimated at -0.3% yoy

South Korea's ability to contain the coronavirus without shuttering businesses has played a critical role in supporting growth, even though a full-year recession looks highly likely. Its reliance on exports means it is not immune to other lockdowns outside of its borders, while we do not expect consumption to return to pre-Covid 19 levels within this year. Higher trade flows globally in H2 might still tip the country back to 0.0% growth, but that will be a surprise rather than the expected.



Dick Yu Sze Ngai Economist +852 2852 5245 dicksnyu@ocbcwh.com



Positive Growth is Still Likely

- Due to the global pandemic, the economic growth of Taiwan decelerated to 1.59% yoy in 1Q 2020 from 3.29% yoy in 4Q 2019.
- For the rest of 2020, due to sluggish private consumption and a turbulent external environment, decelerating economic growth of Taiwan seems to be difficult to avoid in 2020. On a positive note, with growth momentum driven by industrial upgrade and resilient fixed investment, it is still possible to see positive economic growth of 1% -1.6% yoy in 2020.
- The development of the global pandemic, US-China tensions and the uncertainties of cross-strait relations will be the major issues to watch out in the coming months.For our baseline scenario, CBC is possible to have another insurance cut in the fourth quarter of 2020. Nevertheless, the magnitude of rate cut may be capped at 12.5 bps instead of 25 bps.
- Negative interest rates is not a viable option due to Taiwan's unique structure of its domestic banking system and given sufficient room for conventional monetary policy remains

The global pandemic has taken a heavy toll on domestic consumption, inbound tourism and global trade activities. Therefore, the economic growth of Taiwan slowed down from 3.29% yoy in 4Q 2019 to 1.59% yoy in 1Q 2020. For the rest of 2020, due to the prolonged pandemic and concerns over global and domestic slowdown, private consumption is expected to remain sluggish while the outlook of trade is likely to be uncertain. Nevertheless, with the fixed investment staying resilient, it may help to partially offset the adverse impacts. Therefore, we expect Taiwan's GDP to grow by 1% - 1.6% yoy in 2020. In terms of monetary policy, CBC is expected to perform another insurance cut this year in order to stabilize domestic economic and financial conditions. Nevertheless, the magnitude of rate cut is expected to be limited to 12.5bps instead of 25bps.

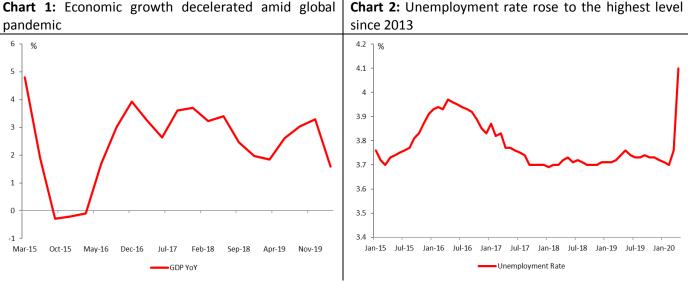
Slack private consumption persists

Private consumption dropped by 1.58% yoy in first quarter. On one hand, amid the outbreak of the Covid-19, domestic consumption (including restaurants and hotels, travelling and recreational activities) was trimmed. However, it has also created business opportunities for internet retail sales and e-commerce platform services, which helped to partially offset the adverse effects. With rising concerns over the bleak economic outlook and rising retrenchments, private consumption is likely to remain weak in the second half of 2020. Specifically, the unemployment rate rose to the highest level since 2013 at 4.1 % in April while the number of employees under furlough agreement surged to a more than 10-year high over 29,000 as of 15 June. Meanwhile, the consumer consumption index declined to 64.87 in May, the lowest level since Dec 2009. On a positive note, relief measures (including stimulus vouchers and cash subsidies for needy) and the resumption of economic activities may help to alleviate the negative



Taiwan

impact. Overall, the downtrend of private consumption is unlikely to be reversed unless the prospects of the domestic economy improve significantly.



Source: Bloomberg, OCBCWH

Fixed investment continues to be the major pillar

Gross capital formation expanded significantly by 5.70% yoy, thanks to investments in transportation equipment, construction and intellectual property products. With the support of three initiatives to boost investment in Taiwan, namely the action plan to welcome overseas Taiwanese businesses to return to invest in Taiwan, the program to help domestic operations with no history of business activity in China, and the plant to accelerate SME investments, fixed investment is poised to remain resilient in the second half of this year. According to official data, the accumulative investment amount of the three initiatives recorded more than TWD 1.36 trillion which couldcreate more than 80000 job opportunities. Specifically, the investment amount is expected to be TWD 325.3 billion for the whole of 2020. Should those investments materialize fully, it may help to boost the GDP by 1.7% in 2020. In short, with the effects of overseas investment repatriation and continuing investment of semiconductor industry, 5G, internet of things (IOT) and offshore wind power, in addition to public investment, the growth of gross fixed capital formation is expected to remain buoyant at above 4% yoy in 2020, which may offset the weak consumption story.

Taiwan



Industrial upgrade in focus

According to President Tsai's inaugural speech on 20 May, Taiwan will continue to engage in six strategic industries on the back of its 5+2 industrial innovation plan, including 1) Continuing to develop Taiwan's information and digital industries; 2) Developing a cybersecurity industry that can integrate 5G, digital transformation, and national security; 3) Creating biotech and medical technology industries that can synchronize with the rest of the world; 4) Developing national defense and strategic industries by integrating military and civilian capabilities; 5) Accelerating the development of green and renewable energy industries; 6) Ensuring the provision of critical supplies, maintain a certain degree of self-sufficiency in the production. The shifting focus on high value-added sectors and a possible rebuilding of supply chain to avoid "over interdependence across globe" may help Taiwan to regain its growth momentum.

Mixed trade outlook

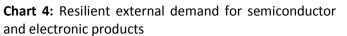
The exports and imports of goods and services dropped by 2.37% yoy and 3.95% yoy respectively, while the exports and imports of goods grew by 3.67% yoy and 3.45% yoy respectively in the first quarter. Exports of services took a hard hit as inbound tourism came to a standstill. Nevertheless, the trade in goods remained robust because of the production resumption in China during March and resilient global demand for semiconductor and computers, electronic & optical products.

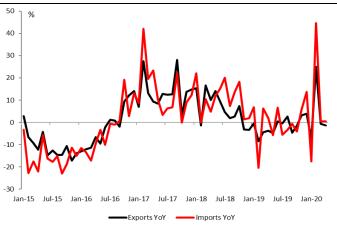
The mixed trade outlook is likely to persist. On one hand, as global travel restrictions are unlikely to be lifted completely any time soon, exports of services (including inbound tourism) may remain muted. Nevertheless, as government provided subsidies to expand domestic tourism, it may help to ease the downside pressure of exports of services. On the flip side, global production activity resumption, emerging demand for semiconductor and electronic applications, prolonged effects of "order transfer", overseas investment repatriation boosting domestic production may continue to support the trade in goods. Nevertheless, we should keep a closer monitor on the development of US-China tension. Tsai' government also announced its plan to continue its New Southbound Policy and to develop other potential markets that encourage firms to engage in international cooperation. With market diversification, it may help to eliminate the negative impact of rising protectionism globally. Should the external uncertainties intensify, the global trade activities involving Taiwan and the Asian electronics supply chain might be harder hit.

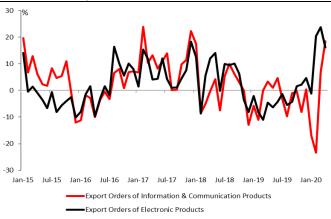


Taiwan

Chart 3: Trade in goods remained robust in 1Q 2020







Source: Bloomberg, OCBCWH

Possible to see positive growth in 2020 despite mounting uncertainties

Affected by sluggish private consumption due to the uncertain economic outlook and rising unemployment concerns, and the turbulent external environment, a growth slowdown seems to be difficult to avoid in 2020. On a positive note, with the growth momentum driven by industrial upgrading and resilient fixed investment, it is still possible to see positive economic growth in 2020. Taiwan's GDP is expected to grow by 1% - 1.6% yoy in 2020. The ongoing Covid-19 developments, US-China tensions and the uncertainties of cross-strait relations will be the major issues to watch out for in 2H 2020.

CBC Is likely to maintain a relatively loose monetary policy

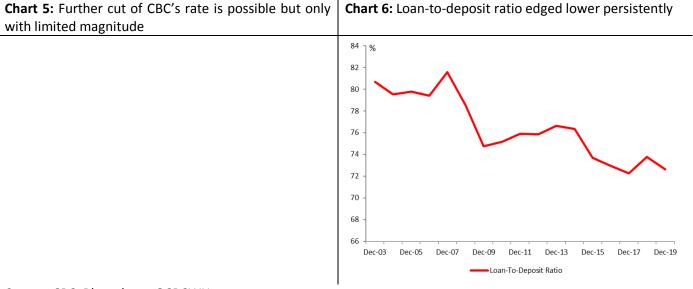
For our baseline scenario, on the back of lingering external uncertainties and a murky domestic economic outlook, CBC may perform another insurance cut this year. This is likely to occur in the fourth quarter of 2020 in order to cushion potential economic deterioration driven by a possible second wave of Covid-19 outbreak. Nevertheless, the magnitude of rate cut may be capped at 12.5bps instead of 25bps. It may be attributable to three reasons. Firstly, the growth downside of its domestic economy has been well-contained compared to other Asian peers, thanks to the effective containment measures. Secondly, excessive easing monetary policy may further fuel the housing market bubble. Thirdly, as the current level of liquidly remains very flush (the weighted average of the TWD overnight rate has hovered around only 0.08%), the marginal impact of further easing monetary policy on domestic economy is expected to be limited. Despite that, we do not rule out the possibility that the CBC may expand its monetary stimulus or perform further rate cuts, should the domestic and external uncertainties deteriorate in the second half of this year. CBC mentioned that it may hold emergency meetings if needed.

Taiwan



Low possibility of negative interest rates in Taiwan

CBC governor Chin-Long Yang suggested that it will be inappropriate to impose negative interest rates in Taiwan. Firstly, CBC still has some room to cut its benchmark rate currently at 1.125%). Secondly, according to the official data, the loan-to- deposit ratio was around 74% in Taiwan. With a negative interest rate framework, this may harm the profitability of corporate banks and the expected returns of depositors. Thirdly, the banking system has been one of the major channels for monetary policy transmission. Further lowering interest rates might weaken the effectiveness of monetary policy communication, should the operation of the banking system be curbed under the framework of negative interest rate system.



Source: CBC, Bloomberg, OCBCWH

OCBC TREASURY RESEARCH Thailand



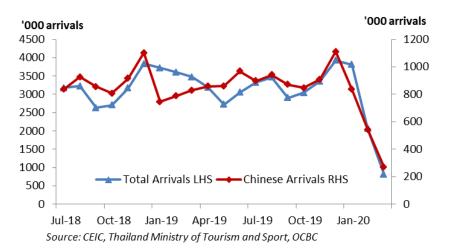
Regional Growth Laggard

- Thailand's reliance on tourism and manufacturing has highly impacted the economy's growth in this Covid-19 crisis.
- 1 trillion baht of fiscal stimulus in the latest round of support measures is unlikely to prevent household spending from contraction this year.
- We forecast Thailand full-year 2020 GDP growth rate at -6.0%.
- We expect one more rate cut from the BoT in Q3 2020.

Worst-hit economy in the ASEAN region

It is not shaping up to be Thailand's year. Before Covid-19 struck, Thailand was already due to face its worst drought in 40 years. The strong baht dampened demand for Thai manufactured goods and there was a budget delay at the start of the year. Covid-19 was the final nail in the coffin.

Thailand's double reliance on tourism and automotive manufacturing has proven devastating in this Covid-19 episode. With travel restrictions worldwide, tourist arrivals in Thailand have plummeted. Private consumption has suffered heavily as a result and we expect a contraction in household spending in Q2 and Q3. Separately, the travel restrictions and reduced wealth effect in the region has seen a sharp drop in demand for automotive – a key manufacturing component that Thailand is particularly reliant on for export revenue.



Tourist Arrivals in Thailand

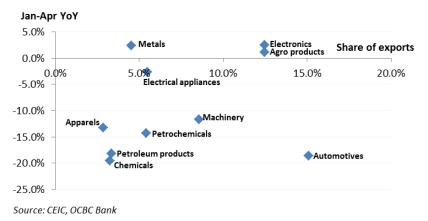
Economist +65 6530 1778 howielee@ocbc.com

Howie Lee

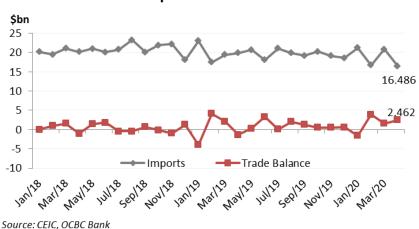


Thailand

Thailand Exports YTD Performance by Segment (THB terms)



Despite the poor exports, however, Thailand still maintains a robust trade surplus due to slumping imports. While the relatively strong Thai baht has hurt the country's export fortunes, it has done little to encourage more imports. April's foreign trade imports fell to a three-year low of \$16.5bn (in part due to the nationwide state of emergency), resulting in a trade surplus of more than \$2bn in the same month. The trade surplus and the resulting current account surplus have, in turn, continued to lend strength to the baht. With a longer-than-expected lockdown hurting the purchasing power of the economy, it is unlikely that imports will improve materially in Q3, which leads to a vicious cycle of a strong baht impacting the country's pricing of goods in the international market.





Source: CEIC, OCBC Bank

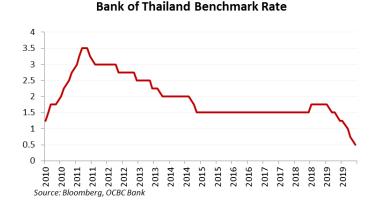
Thailand



1 trillion baht stimulus adds pressure on rates

With the Thai parliament having recently approved the much vaunted 1 trillion baht Covid-19 support programme, we see the pressure to keep funding costs low. However, the government's massive stimulus programme is likely to crowd out private investment and could drive up short-term funding costs.

We thus expect the Bank of Thailand to cut its benchmark rate once more in Q3 by 25bp to 0.25%. Having reduced the Financial Institutions Development Fund (FIDF) rate by 25bp in May to 0.23%, we see the policy space for lower rates to prevail in the country. As far as Quantitative Easing is concerned, however, we do not see that happening in the country at present. Other unconventional monetary policies, however, may come in the form of yield curve control (YCC). The BoT, in implementing YCC, may choose to buy back long-term Thai government bonds (TGBs) and sell shortterm TGBs to fund the government's 1 trillion Covid-19 stimulus. We expect the Thai sovereign curve to flatten in H2, with the 5Y tenor as an anchor.



We estimate full year 2020 GDP growth for Thailand at -6.0%, with the country possibly posting yoy contractions in the following three quarters. Q2 may see a contraction of 14.7% yoy. Until external demand improves, and the Covid-19 severity subsides, Thailand is likely to face a huge uphill battle in spurring economic growth. Thailand's high dependence on tourism and automotive manufacturing means it is likely to post the sharpest contraction among the ASEAN-6 nations in 2020.

Vietnam

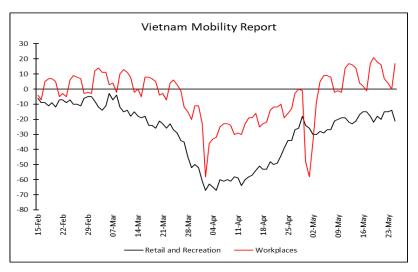


Growth Prospects Remain Robust

- Vietnam's success in combating the Covid-19 may boost their economic recovery in the second half of the year.
- Recent data releases show the economic fallout due to the virus has most likely bottomed.
- Growth in 2020 is still expected to be the best in ASEAN and longterm growth prospects seem bright.

Covid-19 success story

Vietnam has been one of the few success stories in the fight against Covid-19, recording just a total of 328 infections with zero deaths despite having a long border with China and a population of 97 million people. It has not seen a community transmission case since mid-April, a remarkable feat considering how other countries in the region are still struggling to contain the virus. As a result, Vietnam has been able to lift their lockdown measures and restart economic activities much earlier than other countries.



Source: Google, OCBC

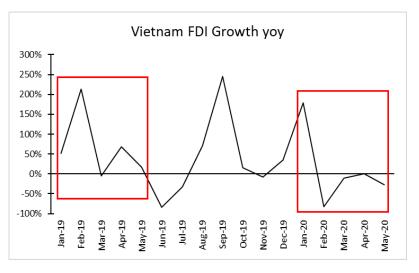
Mobility in retail and recreation and workplaces plunged in March and April due to the lockdown measures imposed but is now rebounding back to pre-Covid-19 levels.

External factors weigh

Although Vietnam has been successful in defeating the virus and reopening its economy, external factors still weigh on its growth outlook. One of the major factors behind Vietnam's economic growth in recent years has been the large inflows of FDIs. However, the pandemic has dented general risk sentiment and made investors more cautious in view of the worsened outlook, which would lead to a fall in FDIs inflows into Vietnam.



Vietnam



Source: CEIC, OCBC

FDI Inflows			
	2019	2020	
USD \$bn	16.7	13.9	
Growth yoy	69.1%	-17.0%	

* as of May 2020

Source: CEIC, OCBC Bank

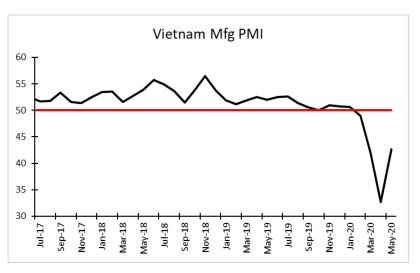
FDI inflows have fallen during the pandemic. To-date in May, funds flowing in have declined 17% compared to a year ago, a total of USD\$2.8bn. The largest drop was in February, when FDI fell 82.6% yoy. With the world facing the sharpest economic contraction since the Great Depression, investors are likely to remain cautious and refrain from large investments, which would likely lead to further declines in the FDI inflows for Vietnam.

Some form of stabilisation

Nevertheless, recent data releases seem to suggest that the economic damage caused by the pandemic has bottomed out, and the Vietnamese economy is gradually recovering as other economies around the world open up.

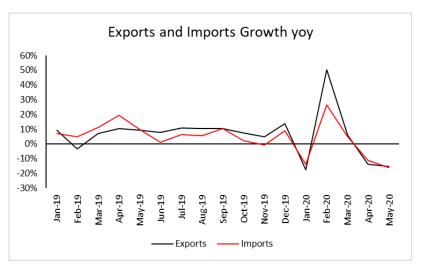


Vietnam



Source: CEIC, OCBC

Vietnam's manufacturing PMI plunged to a nine-year low of 32.7 in April as the manufacturing sector was rocked by lockdowns imposed in Vietnam and other countries. The index rebounded to 42.7 in May and although it still signifies a contraction, it suggests that the worst is over, particularly as Vietnam and other countries have lifted lockdowns.



Source: CEIC, OCBC

The exports and imports data paint a similar picture, plunging 13.9% and 11.4% respectively in April. This was after a surge in February, following the signing of the US-China Phase One trade deal. Even though both exports and imports continued their decline in May, the drop has moderated, suggesting a bottom may be near. In addition, the manufacturing PMI appears to have bottomed out in April and has risen in May, which may bode well for export and import figures in the coming months.

SBV is on hold for now

The State Bank of Vietnam (SBV), in an effort to boost the economic recovery from the pandemic, did two cuts to their refinancing rate in 2020. A total of 150bp was cut from 6.0% to 4.5%, including a 100bp reduction in March. It is perhaps unsurprising to see the SBV cut interest rates in an



Vietnam

environment where various central banks are cutting interest rates aggressively to shore up their economy in the midst of the pandemic. In addition to the refinancing rate cuts, the SBV also lowered other rates, including the repurchase rate to 3%, the overnight lending rate in the interbank market to 5.5%, and the maximum dong lending interest rate for short-term loans to 5%. Looking ahead, the SBV is likely to keep rates lower for longer as they monitor the effectiveness of the stimulus measures and the economic recovery.

Still strong growth

The IMF has projected Vietnam's 2020 GDP growth at 2.7%, a sharp drop from the initial projection of 6.5%. However, it is still expected to be the best performing economy in ASEAN, with other peers expected to suffer a contraction. While the pandemic has damaged Vietnam's economy in the short-term, it could be a boost in the long run as companies attempt to mitigate the risks of concentrating their supply chains in China by decentralising their production chains. Vietnam is poised to be a major beneficiary of this movement from just-in-time to just-in-case production.



Thematic Report

Wellian Wiranto Economist +65 6530 6818 wellianwiranto@ocbc.com

Which Sectors can Ride out Covid-19 Better?

- I am not an equity analyst, and perhaps worth stating upfront that this is not about recommendations that aim to make you money betting on which sectors would outperform others in the post-covid world.
- In case you are actually still reading, this report is about using stock market performance to decipher which sectors have been or perceived by the market to have a good potential in riding out the choppy world.
- By looking at equities performance in the US specifically how each major sector in the S&P 500 index has performed year-to-date relatively – we sketch out how the economy might look like. As the data suggest, while there are some hopeful areas, the road ahead won't be smooth.

Why do this?

Ben Bernanke did it in 1995 and, a lot less illustriously, so did myself back in 2008. Here I am referring to efforts by economists – well-established or otherwise – to utilize stock market performance to understand how economies function in general.

Here, given how much displacement the global economy has gone through in the last few months because of the virus outbreak, I thought it would be interesting to see how market is pricing in the new reality facing us everyday. Specifically, with the question of which sectors might have been riding out the wave better than others, we turn to the equity markets in search for some answers.

To be sure, caveats are aplenty. For one, market is not always right. At a time when momentum trading is itself enjoying a lot of momentum, equities might have run ahead of themselves in some corners – perhaps.

Moreover, the make-up of the stock indices might not fully reflect the underlying composition of the economy, with some sectors more heavily weighted in an index than warranted by their contributions to the GDP, for instance.

On top of that, the performance of specific stocks would reflect a lot more than just what the economy is going through. Anything from corporate fraud to good old poor management, and underlying indebtedness to new product launch can affect how stocks move beyond just how the broader macroeconomy is doing.

Still, in the absence of live feed on how exactly an economy is – because macroeconomic data comes at best with some lags and at worst including doubts about its provenance – how markets are pricing in the outlook of

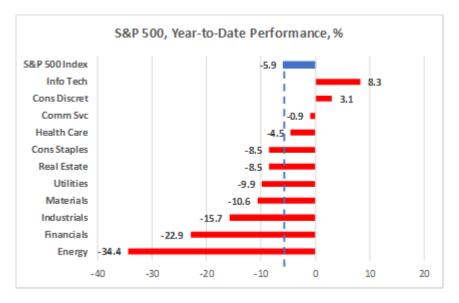


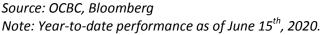
Thematic Report

companies and sectors should offer us at least a glimpse of what might be taking place.

Slicing up the S&P

Let's start with the largest economy in the world, US, with its most widely tracked stock index, S&P 500. Against the backdrop of the overall index down about 6% year-to-date (I am writing this on June 15th), a number of sectors have had a clear outperformance.





It is not a surprise to see the Information Technology sector posting an 8.3% uptick, for instance. With much of the economy in lockdowns of various intensities in the past few months, and working from home turned from a nice-to-have to a norm rapidly, IT has taken on a much larger role. A Zoom call here and a Skype conference there have crowded one's calendar a tad too much. While some US states have since exited lockdown, there is a sense that the flexibility of working from home might still be rather prevalent going forward.

Another relative strong performer has been the Consumer Discretionary sector. At first, given what would have been an expected pullback in consumption in general because of the economic challenges, this sector's outperformance might be surprising – especially set against the downtick in the Consumer Staples sector.

Looking deeper, however, it appears that a few companies might have contributed to the uptick significantly. In particular, in a comparison that has made the rounds on the internet, Domino's Pizza – which went public two weeks before Google did in 2004 – has chalked up returns over the years and into 2020 that are similar to the technology firm. With people being stuck at home with nowhere to go, piping hot pizzas to your front door, has been deemed a delectable enough proposition it seems.



Thematic Report

Elsewhere, healthcare has technically outperformed the broader index, but at -4.5% ytd performance, it might strike some as being rather surprising given how the virus outbreak should be focusing people's attentions back to health in general. It appears that market is taking the view that, even as people may be marginally keener to preserve their health now than before, the postponement of elective surgeries and check-ups and such because of virus infection fears have nonetheless weighed on the prospects.

Moving on, the real estate sector has been a significant underperformer.

On the commercial front, the fact that shopping and dining out would have been hit badly already by the lockdown has obviously not escaped market's attention. The prospects would have been dimmed by the sense that – even if lockdowns are lifted and people can go out once more – very few would be as enthusiastic as before in doing so still given the lingering infection risk. Not to mention that their ability and willingness to spend would have been curtailed by the challenging economic outlook, as well.

On the residential front, even if people would now treasure what they have under their own roofs a lot more than before – and would have wished to upgrade to a bigger, better place – their ability to do so may again be curtailed by financial considerations.

Back to the sectoral breakdown, another major underperformer has been the Industrials sector. Here, its lack of performance would not be surprising to you at all, once you realize that airline stocks belong to that category. While the legendary investor, Warren Buffett, might have had his tall legacy somewhat diminished by his entry-and-exit timing of his purchase of airline stocks, the underlying reasons behind his ultimate exits would likely be shared by other investors for a while. Even though pent-up demand in travel is there, and enough for some to perhaps even book air tickets as far along as 2021, the reality is that the reduction in business travel and leisure travel might be an ongoing theme for a while more.

All in all, without going through the other sectors in details, it might already be evident that – as suggested by the US stock market performance – the reality that the global economy has to face in terms of adjustments would be considerable. As people eat in more, go out less, travel only rarely, to say that there would be a structural shift in the economy – and within it the labour market – is an understatement.

As much as the multitudes of economic stimulus packages may have helped in limiting the impact that the lockdowns have had on job losses, the reality that some sectors may undergo massive shifts such that at least some jobs within them may be gone for good is something that authorities would have to keep in mind. Going by Bloomberg's analysis, for instance, such "reallocation shock" may permanently wipe out 30% of jobs for those who are currently unemployed. Hence, even though we continue to be hopeful of a smooth-even-if-gradual recovery in the coming months, the degree of such structural shift would weigh on any hope for a speedy V-shaped recovery.



Thematic Report

Pandemic

Dick Yu Sze Ngai Economist dicksnyu@ocbcwh.com The rising trend of regionalization and global supply chain redeployment seem to have hardly reversed during the postpandemic period. Other than cost concerns, national security and the reliability of supply will be critical consideration for corporates in deciding the distribution of the global supply chain in the future.

Global Supply Chain Changes Post-

- Significant changes in the global supply chain redeployment are foreseeable, including the shortening of the global supply chain, supply chain diversification and reallocation, and rebuilding the mixed business model between "just-in-time" and fixed inventory.
- Top priorities are establishing localized and comprehensive supply chains, investing more in autonomous R&D and building up strategic reserves for essential materials on a wider range.
- To a certain extent, the international division of labour could be replaced by regional cooperation

Globalization has accelerated since the 1980s, with growing interdependence of economic cooperation, cultural exchange, trade in goods and services and foreign investments across globe. Nevertheless, globalization also leads to unintended consequences including growing wealth disparity, environmental issues and labor exploitation. Globalization appears to have peaked during the global financial crisis in 2008 with the growth of international trade in goods.

The reallocation of supply chains has been hotly debated in 2019 amid the intensifying trade tension, especially with the US-China trade war and rising production costs. The global pandemic also exposed the fragility of globalization,, especially in terms of global supply chain disruptions. Nevertheless, it is still too early to call for the end of globalization. While the rising trend of regionalization and global supply chain redeployment seem to be hardly reversed, it is clear that beyond cost concerns, national security and stability of supply will be critical consideration for corporates to decide their distribution of global supply chain going forward.



Thematic Report

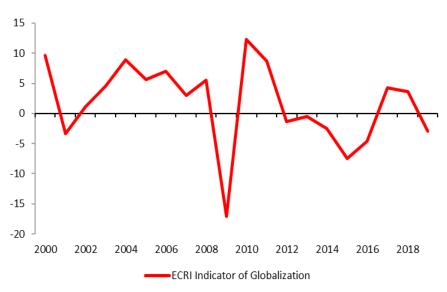


Chart 1: The trend of de-globalization speeded up since US-China trade war. (ECRI indicator of Globalization: World Trade Growth – World GDP Growth)

Accelerating Supply Chain Diversification and a Changing Business Model

Cheap labor costs and the advantage of division of labor, manufacturers have been keen on establishing overseas production bases, contributing to the formation of a complex interdependence of supply chains. This meant that each region only specializes in single production process or component. In other words, the whole production process could collapse should any single unique supplier shut down temporarily.

Affected by lockdown measures and transportation disruption, the global supply of raw materials and components has been affected adversely. This has introduced new sources of instability for production. For example, car manufacturing activities in Western Europe nearly came to a standstill, as the sole manufacturer of electronic parts, MTA Advanced Automotive Solutions, had been forced to cease the plant's operation in Italy amid the pandemic outbreak.

Even though the production bases have been diversified geographically, the shortage of raw material supply might also disrupt the production chain amid the over-dependence on a single supplier or sole production in single country. For example, Taiwan Semiconductor Manufacturing Company (TSMC) accounts for 22% of the world's semiconductor integrated circuit wafer fabrication capacity and more than 50% of the foundry capacity. Yet, despite establishing production bases in different regions, including China, Taiwan and the US, it has still depended on a single German supplier for its advanced lithography systems.

More convenient transportation has been another crucial factor accelerating the development of globalization. With the advancement of the international traffic network, more companies have adopted "just-intime" supply chains, rather than establishing ample storages amid cost concerns. Nevertheless, the recent lockdown measures have taken a heavy toll on production activities and transportation stability and revealed the



Thematic Report

vulnerabilities of over-specialization in the supply chain. According to industry information, the global production of laptops dropped by more than 50% in February while the production of smartphones could decline by 12% in the second quarter as a result of lockdown in many Asian countries, given that most such manufacturers are located in Asia.

In the post-pandemic period, significant deployment changes in the global supply chain are foreseeable, including the shortening of the global supply chain, supply chain diversification and reallocation (e.g, establishing production bases in different geographical locations, obtaining essential materials of production from more than one sources and avoiding over-specialization in production process) and rebalancing between "just-in-time" and fixed inventory.

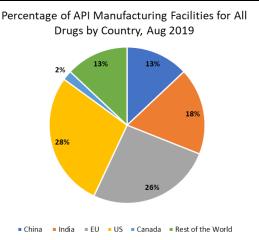
Compelling needs to safeguard critical material supply and storage

To recall, with rising protectionism and trade conflicts last year, parts of sensitive technology and crucial electronic components were banned from export, in turn affecting the whole production chain. Therefore, more countries are planning to increase the control and development over core or sensitive technologies and establish more localized industrial chains to stabilize the supply. The global pandemic has reinforced the urgency to establish a stable supply and the storage of critical materials across globe. Essential medical supplies are typical examples. For example, the global supply of reagents, which is an essential component to produce test kits detecting viral RNA, has been dominated by two manufacturers, including Qiagen and Roche laboratories. Transportation disruptions and insufficient production capacity to meet drastically rising demands have led to the supply shortage of test kits. Meanwhile, a large proportion of pharmaceutical ingredient production for the US's consumption has been produced overseas including the EU, India and China. This idea has been also applicable to other protective equipment including masks and ventilators. The potential crisis of public health and national security might re-emerge should the lockdown measures or export prohibition persist amid the possibility of a second wave outbreak of Covid-19 in winter.

Therefore, it is obvious to see the urgency to develop solid supply chains and storage of critical materials and sensitive technologies on a national level, whether based on concerns over rising protectionism, public health, or even national security. The potential movements might include establishing localized and a comprehensive supply chain, investing more in autonomous R&D and building up strategic reserves for essential materials in a wider range. It might help to eliminate the negative impact of overinterdependence among countries, especially in the event of unexpected shocks like a global pandemic.

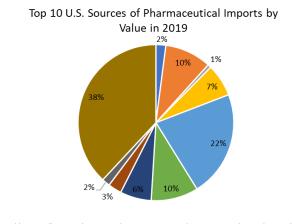
Thematic Report

Chart 2: Manufacturing locations of APIs for US market diversified overseas.



OCBC Bank

Chart 3: US imported tremendous pharmaceutical products in 2019, amounting more than USD 78 billion



■ China ■ India ■ Mexico ■ Canada ■ Germany ■ Italy ■ UK ■ Israel ■ Spain ■ Ireland

Source: FDA, US Census Bureau, OCBCWH

Rising regionalism and bilateral agreement

The "Supply Chain Globalization" was designed to minimize the production costs through more efficient transportation and a meticulous division of labor. Nevertheless, with persistent US-China tensions and the Covid-19 shock, the stability of supply and national security issues may play a more important role in global supply chain redeployment beyond just cost concerns. During the post-pandemic period, regional cooperation and bilateral agreements are likely to dominate global specialization decisions, in order to strike a balance among cost minimization, national security concerns and supply chain stabilization.

To a certain extent, the international division of labor could be replaced by regional cooperation over raw material supply, labor supply, production skills and the consumer market. The USMCA trade agreement would be a good example. Low cost of labor and food supply can be found in Mexico (primary market). Canada can offer ample supply of raw material and heavy industry (secondary market) while the US can take the role in advancemanufacturing, professional services and consumer market (tertiary market). Under the USMCA's framework, the integrity of the regional supply chain is more complete. More importantly, during the post-pandemic period, border control will become a more important political issue and the risks associated with long global supply chains will be highlighted further with concerns over the potential outbreak of Covid-19 again.

On the flip side, economic integration is likely to continue while bilateral agreements may be more prevalent rather than multilateral trade agreements, as countries balance between national interests and the stability of essential material supplies.

In short, global supply chain redistribution seems to be an imperative on the back of a prolonged US-China trade conflict and the Covid-19 supply shock. Unlike the story of supply chain reallocation driven by cost concerns



Thematic Report

in the past, future global supply chain redeployment will also be driven by stability of supply and national security issues During the post-pandemic period, we may expect to see accelerating supply chain diversification and changes in the business models, e.g. rethinking about the "just- in- time model" to increased priority in protecting critical material supply and storage. The Covid-19 pandemic might not be the catalyst to end globalization, but economic integration is still likely to shift to another modes, including regionalization and bilateral cooperation.



Thematic Report

Carie Li Ruofan Economist +852 2852 5767 carierli@ocbcwh.com

Caught in the Crossfire

- HK seems to have become the proxy battleground for the US-China relationship. As a response to China's move to promulgate national security law in HK, US President Trump vowed to take action to revoke HK's special treatments under the US-HK Policy Act.
- Among all the preferential treatments, three are relatively important. First, the status of separate customs territory. As the US had the largest trade surplus with HK while domestic exports to the US merely accounted for 0.1% of HK's total exports in 2019, it may not be favourable for the US to cancel the first special treatment given the risk of retaliation.
- Second, the right to freely exchange USD with HKD. Given that HK is the third largest USD trading centre in the world while a lot of US companies locating and US residents living in HK, this may be the least likely area that the US would like to touch.
- Third, the access to American sensitive technologies. It seems more likely for the US to revoke this preferential treatment, in addition to sanctions on Chinese officials and firms as widely expected. This could be unfavourable to HK's trade sector which mainly ships hightech products.
- In the short run, as the heat is turned up, HK may inevitably feel some pain. However, HK is still likely to weather the US-China tensions in the medium term. First, HK could remain a key re-export port on the back of the accelerating regionalization. Second, HK is likely to be able to maintain the peg system and restore the confidence of foreign investors. Third, HK may continue to play a key role in the opening up of China's financial market as well as the RMB internationalization.

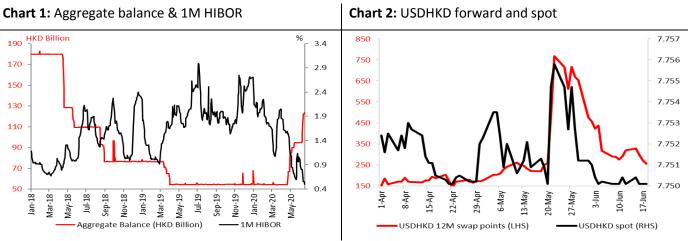
HK seems to have become the proxy battleground for the US-China relationship which had turned more fluid following the coronavirus blame game. As US-China bilateral tensions escalated and HK's social movements showed signs of resumption, China was prompted to draft the national security law for HK in late May. In response to China's proposed move, the US Secretary of State reported to Congress that HK is no longer autonomous from China. Market's knee-jerk reaction was a sharp increase in USDHKD spot and forward as well as HIBOR amid rising concerns about capital outflows.

However, market sentiment turned upbeat post US president Trump's press conference on China. Trump did not go into details apart from vowing to revoke HK's special treatments as a separate customs and travel territory and take steps to sanction officials. In the meantime, HK's financial secretary and HKMA's Chief Executive talked to calm the market, and confidence in HK's financial system and currency peg system rebounded. Adding on rally in global risk sentiments, broad dollar weakness, the return of carry trade and strong real demand for HKD, USDHKD spot not only



Thematic Report

dropped but touched 7.75 once again. This prompted the HKMA to sell totally HK\$32 billion to defend the currency peg, signalling capital inflows.



Source: Bloomberg, OCBCWH

Still, we have to remain wary of the looming potential political risk and watch out for the details of US' response regarding HK issue.

Among all the preferential treatments under the US-HK Policy Act, three are relatively important. First, the status of a separate customs territory. The loss of such a status means that tariffs imposed on Chinese exports will also be applied to HK goods. That said, it may have limited direct impact as preferential tariffs are not applicable to re-exports (98.8% of HK's total exports) while domestic exports to the US represented merely 0.1% of HK's total exports. In comparison, the US had the largest trade surplus with HK in 2019. More notably, HK was the third largest export partner of the US for wine, the fourth for beef and the seventh for agricultural products in 2018, thanks to the zero-tariff. This suggests that the direct impact on US could be larger should there be any retaliation.

Thematic Report

Chart 3: Composition of HK's exports

Source: Bloomberg, U.S. Census Bureau, OCBCWH

Chart 4: US' trade surpluses by country in 2019

OCBC Bank

Rank	Country	Surplus (USD Billion)
1	Hong Kong	26.1
2	Netherlands	21.5
3	United Arab Emirates	15.7
4	Australia	15.2
5	Belgium	14.6
6	Brazil	12.2
7	Panama	7.3
8	United Kingdom	6
9	Chile	5.4
10	Singapore	5.2

Second, the right to freely exchange USD with HKD. In fact, it is hard to force the tightly integrated global financial market to isolate HK, which was the world's 4th largest FX centre handling US\$632 billion daily average FX turnover in April 2019. The HKMA also confirms that the free flow of capital and free convertibility of the Hong Kong dollar will continue to be safeguarded by Article 112 of the Basic Law. However, lately, US Treasury Secretary Steven Mnuchin said he was working on the details of the response to HK issue and did not deny that US Treasury was considering measures that could restrict capital flows from the US through HK. Besides, market frets that the US will ban HK from the use of the swift code or the USD clearing system. If this is the case, it may undermine the ground for the strength of HK's financial market. As a result, there could be potential spill over effects in the form of a capital exodus, speculation of a break of peg system, relocation of foreign financial companies, reduction in Foreign Direct Investments (FDI) and downgrade of sovereign rating in a worst-case scenario.

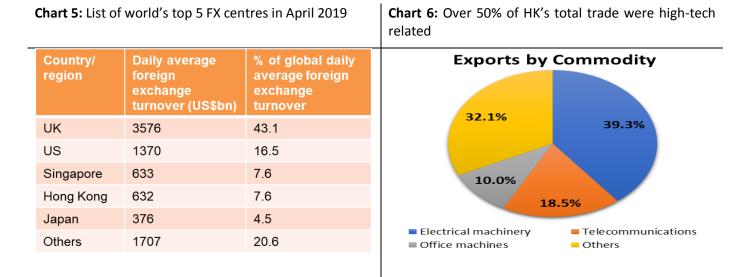
That said, should the stability of HK's financial market be harmed, US' interest could be hurt as well. HK is the third largest USD forex trading centre in the world. More than 1,300 American companies, including most of the major U.S. financial and technology firms, have business operations in HK while 85,000 U.S. citizens live in HK. As such, this is expected to be the least likely area that the US would like to touch

Third, the access to import American sensitive technologies. As HK is the main re-export hub (as re-exports took up 98.8% of total exports) connecting China and other countries, to cancel this treatment could be considered an extension of US-China trade war or technology war. In 2019, 4.8% of HK's total imports came from the US, among which 36.7% were "electrical machinery, apparatus and appliances, and electrical parts thereof" and "telecommunications and sound recording and reproducing apparatus and equipment". During the same period, these two kinds of commodities accounted for 66.8% of HK's exports to Mainland China. Besides, 64.5% of total trade in HK were high-tech related in 2019. It is reported that HK has helped to import telescopic sights, communications satellites, semiconductor chips, mass spectrometers, etc. from all over the

Thematic Report



world including the US to China. As such, without such a special treatment, the trade sector of both HK and China could feel some pain.



In the short run, as the heat is turned up, HK may inevitably feel some pain in terms of its crucial trading and logistics as well as the financial sector which together contributed to 41% of total GDP in 2018. However, HK is still likely to weather the US-China tensions in the medium term.

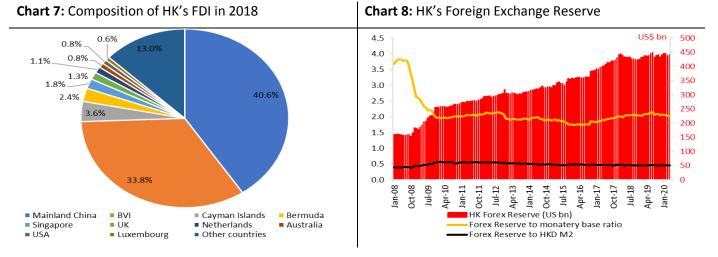
First, HK could remain a key re-export port connecting China with the rest of Asia on the back of the accelerating regionalization. Despite the pandemic and US-China tensions, HK's exports to Asia as a whole increased for the third consecutive month by 2.7% yoy in April. Also notable is that most of the top 10 trading partners of HK are Asian countries which respectively took up 84% of total imports and 74.5% of the city's total exports in April. Meanwhile, ASEAN has superseded EU as the largest trading partner of China.

Second, HK is likely to be able to maintain the peg system and restore the confidence of foreign investors. On the one hand, the HKD is now flirting with the strong end of the trading band on the back of active carry trade and strong real demand associated with vibrant IPO pipeline, half-year end and concentrated dividend payouts (about HK\$300-400 billion, over +20% yoy). Also notable is that the linked exchange rate system was established in October 1983, way before the US Congress passed the US-HK Policy Act in 1992. This indicates that the risk of de-pegging is minimal at this juncture. On the other hand, in terms of capital outflows which could be triggered if US's response touches the financial area, the amount may not be significant. US contributed to merely 1.9% or HK\$291 billion of the stock of FDI at end of 2018. Meanwhile, US investors took up only 9.6% of the total trading value of HK's US\$4.9 trillion stock market in 2018. Still, the potential risk of massive outflows and speculative attack on the currency peg cannot be totally ruled out. On a positive note, the PBOC will support HK to defend the currency peg if necessary and the central bank signed an HKD-USD swap line agreement with HKMA last year, according to HK's Financial Secretary. In other words, HK's strong foreign exchange reserve (US\$441.2 billion or more than two times HK's monetary base or 46% of HKD M2) and fiscal

Thematic Report



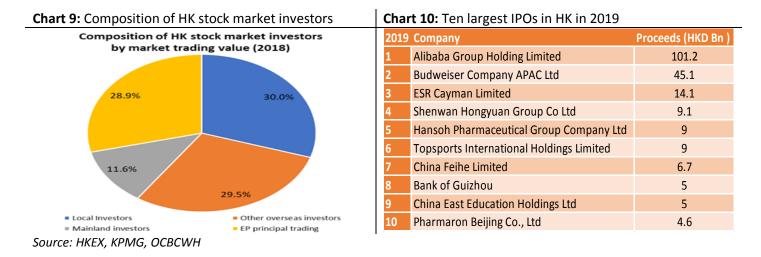
reserve (HK\$800-900 billion) together with China's sizeable foreign exchange reserve (US\$3.09 trillion) will support HKMA to well maintain the peg system which provides solid ground for HK's financial system



Third, HK may continue to play a key role in the opening up of China's financial market as well as the RMB internationalization. In fact, most of HK's stock of FDI came from China (HK\$4.1 trillion in 2018) or Chinese firms located elsewhere. Besides, Chinese companies have viewed HK as the key platform for offshore financing including USD bond issuance and IPOs. In particular, local and Chinese investors contributed to 41.7% of total trading value of HK's equity market, which makes the IPO market less vulnerable to US-China tensions. In 2019, eight out of the top 10 largest Hong Kong IPOs were launched by Chinese names including Alibaba, which allowed HK's IPO market to rank the first globally by IPO proceeds. Following Alibaba, JD.com and NetEast launched their second listing in HK in June. More second listings by the US-listed Chinese firms are likely to come given the looming US-China financial war and may bring in capital of over US\$10 billion. This may support HK's IPO market to continue flourishing. Furthermore, according to the HKMA, more than half of the foreign stock and bond investments on the Mainland are conducted through HK. The success of stock connect and bond connect schemes reinforces the fact that foreign investors are keen to get access to Chinese assets. The latest measures rolled out by the PBOC to promote financial integration of the Greater Bay Area hint that more channels would be developed to connect the crossborder capital.

Thematic Report





Simply put, at the end of the day, we may just see a reshuffling of people, capital and goods. Neither the large market of China nor the resilient economic, financial and regulatory systems as well as ease of doing business in HK will be easy to give up at this juncture.



Howie Lee Economist +65 6530 1778 howielee@ocbc.com



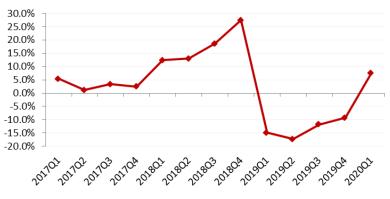
 In a world wrecked by Covid-19, electronics demand has remained surprisingly resilient.

OCBC Bank

- The sector was one of the worst hit by US-China trade tensions last year.
- Covid-19 has accelerated work-from-home migrations and Ecommerce lifestyles. Demand for enhanced cloud computing capabilities have also risen.

The electronics sector in 2019 was hard hit by US-China trade tensions

In 2019, the electronics industry globally took a hard hit from the ongoing US-China trade war. Economies heavily reliant on electronics manufacturing and exports – South Korea, Taiwan and Singapore – all felt the strains. As a measure of electronic end-user goods demand, global sales of iPhones last year contracted every quarter on a yoy basis. The electronics cycle seemed to be on a downtrend as the US-China tensions contributed to negative wealth effects and diminished demand for electronics. At the same time, shifting supply chains from the US-China trade war negatively impacted the export flow of intermediate electronic components. Meanwhile, Huawei, being embroiled in the US-China crossfire, also had a negative impact on demand for intermediate electronic parts.





The electronics sector in 2020, however, looks resilient

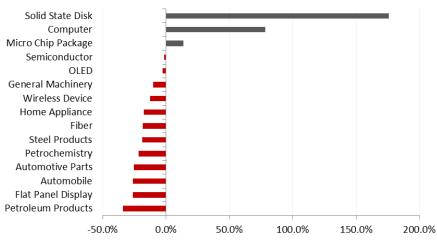
We had initially thought that the electronics sector would be one of the hardest hit by the outbreak of Covid-19, following the path set in 2019 over the US-China trade war. However, that has proven to be erroneous. The electronics sector has proven resilient and is one of the best sectoral performers year to-date.

Source: Bloomberg, OCBC Bank



Thematic Report

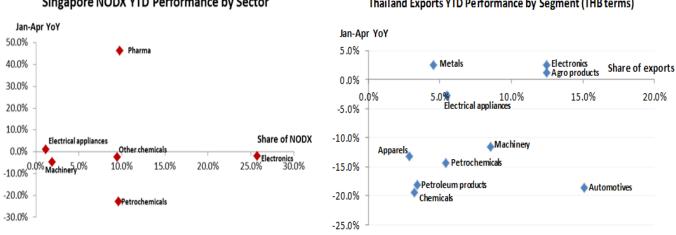
A look at electronics manufacturing heavyweight South Korea does illustrate this trend. Year to-date, its top exports are solid state disks (SSDs), computers and microchips - all three have posted year to-date gains on an aggregate yoy basis. At the other end of the spectrum, the likes of petroleum products and automobiles have, unsurprisingly, posted the sharpest yoy contractions.



South Korea 2020 Exports (Jan-May) YoY %

Source: CEIC, OCBC Bank

This trend is also consistent in Singapore and Thailand. Thailand has also recorded a 2.4% yoy growth in electronics exports on a year to-date basis. Singapore's electronics exports, meanwhile, has declined 1.9% yoy on a Jan-Apr yoy basis. When one considers, however, that Singapore's electronics export growth in 2019 was -22.5% yoy, the decline of 1.9% so far looks to be a huge improvement.



Singapore NODX YTD Performance by Sector

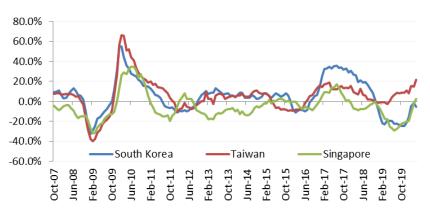
Thailand Exports YTD Performance by Segment (THB terms)

Source: CEIC, OCBC Bank



Thematic Report

In Taiwan, the upbeat demand for electronics is even more stark. By our calculations, on a rolling 3-month basis, Taiwan's electronic exports have posted a growth of 21.7% yoy as of April. The graph below shows the three economies of South Korea, Singapore and Taiwan displaying an increasing trend in the electronics demand cycle.



Electronics Exports YoY%, 3mma

Source: CEIC, OCBC Bank

Reasons for electronics resilience

We think there are three main reasons:

- Covid-19 has ushered in work-from-home (WFH) arrangements on an accelerated scale and shifted consumption habits online. Companies and workers had to beef up their technological capabilities and purchase WFH gadgets as travel restrictions around the world set in. Food caterers and other retail stores suddenly had to go online and possess a working digital platform if they were to stay afloat. All these boosted the demand for not just end-user devices but increased the need for improved technological infrastructure such as cloud computing.
- South Korea and Taiwan managed to best contain their Covid-19 outbreak in the region, and by sheer coincidence, these two economies are also electronics manufacturing heavyweights. That has meant minimal disruption to the electronics supply chain as compared to the likes of automobile or petrochemical production. Additionally, with China being the first economy to lift restrictions, the terminal demand for electronics goods was also boosted by China's early return to the market.
- Supply chains have been more regionally entrenched since the start of the US-China trade war. The US-China trade war forced economies in the region to look inwards so as to minimise disruptions from the ongoing conflict. Shifting supply chains were undoubtedly disruptive last year but were already set in motion as tensions between US and China escalated. When Covid-19 struck,



Thematic Report

regional supply chains are more established from last year's shifts and better positioned to brace the Covid-19 onslaught.

What it means for electronics producing economies

We think Singapore is the largest beneficiary. In addition to its exceptional biomedical exports and production, the resilient electronics industry will provide another pillar of support for its manufacturing scene. These twin boosters could very well provide the Singapore economy the platform for an accelerated rebound in Q3 and Q4.

South Korea and Thailand, meanwhile, are heavily weighed down by poor automobile sales. The decline in sales of vehicles and other automotive likely outweigh any positivity from the upbeat demand in electronics.

For Taiwan, outside of electronics, its exports of precious stones and vegetable oils have also made ytd gains. These segments, however, are relatively small and account for 0.5% of Taiwan's total exports in 2019. Other sectors have seen demand weakening over Covid-19 and it is unlikely the electronics sector alone would be able to support the entire export industry of Taiwan.



Tommy Xie Dongming Economist +65 6530 7256 xied@ocbc.com



 Global new confirmed cases continue to rise at an unpresented pace led by the deteriorating situation in South America and South Asia.

OCBC Bank

- Pressure on medial resourcess has eased. The increasing awareness of the virus, the rise of individual social responsibility and the wide use of masks contributed to the Covid curve flattening.
- The risk of a second wave of infections is real as a large proportion of population remains susceptible to novel coronavirus.
- The falling correlation between new cases and new deaths was probably due to the better readiness of our medical system if we have to face the second wave of infections.
- Four possible routes to normalcy include herd immunity, effective treatment, antibody and vaccine development.
- Each route comes with its own pros and cons. It is important for us to understand that.

Six months into the outbreak of novel coronavirus and three months into the pandemic, the world has turned upside down. While we are trying to adjust to the new normal such as social distancing and working or studying from home, people are searching for the answers for how soon we can return to pre-covid-19 normalcy. In this special report, we will cover three areas including a reality check, how will the second infection wave look like and possible routes to normalcy.

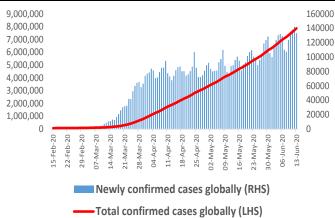
Reality check

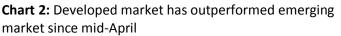
As of 13 June, total number of confirmed cases globally has hit 7.86 million with more than 430 thousand patients having lost their life. Although the number of new confirmed cases continued to decline in western Europe and plateaued in the US, the number of new confirmed cases continued to rise globally as situation in South America and South Asia deteriorated significantly.

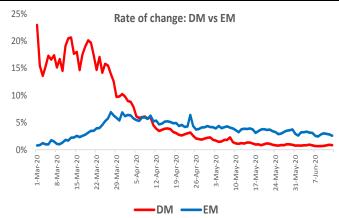


Thematic Report

Chart 1: Daily number of new confirmed cases globally continue to increase







The total number of confirmed cases in Brazil has exceeded 860 thousand as of 11 June, making Brazil the world's second most infected countries. Meanwhile, India took over the UK and Spain to become the world's fourth most infected countries after the US, Brazil and Russia. What's more, given the testing capacity in both Brazil and India was less than 10% of that in developed countries, the number of new cases is expected to rise further after both countries ramped up their testing capacity.

Pressure on medical resources has eased

Despite the gloomy headline numbers, we think the pressure on medical resource has eased thanks to the falling fatality rate and an improving global recovery rate. As of 11 June, the global fatality rate has declined to about 5.6% from the peak of 7.2% in late April. Meanwhile, more than half of the patents globally have been discharged.

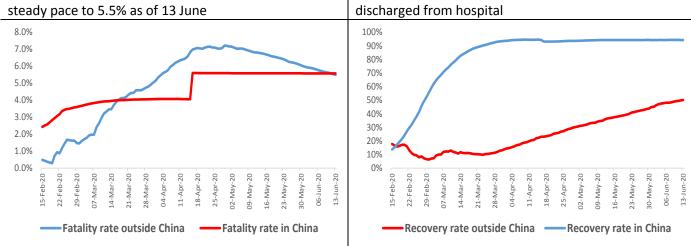


Chart 3: The fatality rate outside China has fallen at a Chart 4: More than half of confirmed cases have been

The implementation of lockdowns and people movement control has bought our medical system some time to recover from initial panic run. Meanwhile, the increasing awareness of the virus, the rise of individual



Thematic Report

social responsibility and the wide use of masks also contributed to the Covid curve flattening.

The easing pressure on medical resources is one of the key reasons why the impact of Covid-19 on the global financial market has diminished even though the number of new confirmed cases continues to rise at a fast pace.

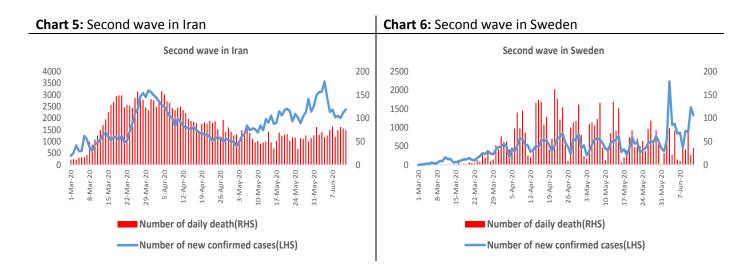
Watching out for the second wave

As the decline of new cases in Europe and some parts of Asia was mainly the result of lockdown, this also suggests that a large proportion of the population remains susceptible to the virus. Should intervention measures be gradually removed, the risk of a new wave of infections cannot be ruled out.

Although most experts had already warned that the possible second wave of transmission could re-emerge in autumn or winter as the virus is in favour of colder weather, the volatility of global financial market has surged recently due to growing concerns about the possible second wave.

How will the second wave look like?

After scanning each individual country, we found that Iran and Sweden have shown signs of second wave of transmission recently. On a positive note, despite the resurgence of new cases recently, the number of new deaths has not shot up as what we observed in the first wave in March. The falling correlation between new cases and new deaths is probably due to the better readiness of our medical system.



As long as medical resources are ready, the disruption from the second wave to the economy may not be as large as that from the initial outbreak. In addition, the amount of resources pooled to support the manufacturing of medical equipment is also unprecedented. According to China's white paper about fighting the covid-19 published on 7 June, from 1 March to 31 May, China alone has exported 70.6 billion masks, 304 million PPEs, 115 million goggles, 96.7K ventilators, 225 million test kits and 40.29 million infrared thermometers.

Thematic Report



Routes to normalcy

Overall, we believe we are better prepared for the possible second wave of transmission. To be more mentally and physically prepared for the pandemic is an important first step to expedite the speed of returning to normalcy. To complete its final journey back to normal, there are four possible routes including herd immunity, effective treatment, antibody and vaccine.

Passive herd immunity is not a good option

A successful vaccine will eventually lead to herd immunity which protects the community from the infection. However, a passive herd immunity strategy which allows 70% of its people to be exposed to virus is still subject to debate.

As one of the only few countries reluctant to impose lockdown, Sweden has drawn lots of attention. Although the Swedish government has taken measures to protect seniors such as recommending people over 70 to stay at home and banning visits to nursing home etc, its herd immunity strategy still exposed some vulnerable groups to the virus. As compared to its neighbouring Nordic countries, Sweden reported a much higher number of confirmed cases as well as a higher fatality rate.

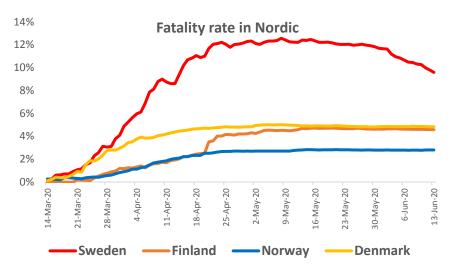


Chart 7: Sweden reported higher fatality rate as compared to its Nordic neighbours.

In addition, the passive herd immunity strategy is facing a big risk. The World Health Organization warned that there is no guarantee that an onetime infection leads to protection from re-infection due to our limited knowledge about antibody and mutations.

Repurposing existing anti-viral drugs

The world is in a race to find drugs and vaccines to battle the novel coronavirus. However, given the effective vaccines may be still be months or quarters away, there is an urgent need to search for effective methods to protect our vulnerable groups from the virus.



Thematic Report

Repurposing the existing anti-viral drugs is the fastest way to find an effective treatment to shorten the recovery time for patients. Since the outbreak of the covid-19 in China, thousands of drugs have been scanned and several existing drugs stood out and are being investigated in clinical trials.

Table 1: Repurposing existing anti-viral drugs				
Drug	Initially developed for	Rational	Adverse effect	
Lopinavir/Ritonavir	HIV	Inhibits an enzyme to reduce viral replication	May cause liver injuries	
Hydroxychloroquine/Chloroquine	Malaria	Prevent virus from entering human cell	Cardiac health problem	
Remdesivir	Ebola	Inhibit viral replication	More study needed, Concerns on male reproduction ability	
Lianhuaqinwen Capsule	Influenza	TCM: Herb's anti inflammatory effects	No serious adverse events	

The most controversial drug is hydroxychloroquine and chloroquine. China added chloroquine into the general treatment list in February in its Diagnosis and Treatment Protocol for Novel Coronavirus Pneumonia. The drug received global attention after President Trump touted it as a potential game changer in March. Since April, the drug has started to lose its shine after a number of researches questioned its effectiveness. The tension escalated in June after two research papers proving ineffectiveness of hydroxychloroquine using data provided by same data provider were retracted from two top medical journals due to concerns about data quality. The recent hydroxychloroquine saga has clouded the prospect of this medicine as a possible treatment for covid-19.

Among all the drugs, Remdesivir is likely to be the most hopeful candidate so far. Remdesivir received the conditional approval from Singapore's Health Sciences Authority on 9 June to treat severe cases in Singapore. A number of clinical trials showed that Remdesivir is able to interfere with the reproduction of virus, which may help prevent mild cases from developing into severe cases. However, the statistic insignificance to lower the deaths based on the US clinical trial and limited clinical benefits for severe patient groups based on China's clinical trial showed that this medicine alone is not a game changer. In addition, more investigations are needed to study the adverse side-effects? of this medicine.

The Traditional Chinese herb is also playing its part in fighting covid-19. In China, one of the TCM **Lianhuaqinwen (LH) capsule** received attention. The research result of the prospective multicentre open-label randomized controlled trial published in late May showed that LH capsules have shortened the duration of fever, fatigue and coughing by 1, 3 and 3 days respectively with no serious adverse events. The recent studies also show that the capsule can help inhibit the release of certain elements causing inflammation.



Thematic Report

Repurposing existing anti-viral drugs has its own pros and cons. It can save lots of time, but we need much larger scale clinical trials to prove its effectiveness as well as finding possible adverse events. We are still far from a proven treatment currently.

Antibody therapies

Other than repurposing the existing anti-viral drugs, antibody therapy could be another promising treatment. Although it may take longer to develop antibody as compared to repurposing existing drugs, it is still a faster alternative to vaccine.

Since February, China has utilized plasma therapy to treat patients with rapid disease progression, severe and critically ill symptoms. According to China's Covid-19 white paper, as of end of May, convalescent plasma had been collected from 2765 recovered patients, and 1689 patients had been treated with the therapy, with positive results. China's experience showed that plasma therapy has successfully brought down the number of severe and critically ill cases.

However, the downside of the plasma therapy is that it is difficult to be scaled up as the supply of antibody-rich blood is limited due to limited number of recovered patients.

As such, biotech companies globally have focused on developing monoclonal antibodies (mAb), which are antibodies that are made by identical immune cells that are all clones of a unique parent cell. The mAb will direct against the spike protein of novel coronavirus which is designed to block viral entry to cells.

The pros of mAb is that the production of antibodies can be scaled up in large quantities. Meanwhile, it can also play a role of prevention other than treatment as the antibody may neutralize the virus before it binds with the human cells. However, the cons of mAb is that it could be much more expensive than vaccine. According to the chief operating officer from Junshi Biosciences that high amount of protein in antibody drugs means it will be costly.

Currently, two monoclonal antibodies have started human trial and more are expected to join the race including the drug developed by Singapore company Tychan.

Table 2: Monoclonal antibody in clinical trial					
Companies	Country	Antibody Name	Phase 1 Trial from	Note	
Eli Lilly and Company	US	LY-CoV555	1-Jun	Results to be reviewed in late June	
Shanghai Junshi Biosciences	China	JS016	7-Jun	It is the first trial in healthy people in the world	
Tychan	Singapore	TY027	Mid Jun	Aimed at covid-19 patients	

Other than those three antibodies which have received approval for clinical trials, there are more antibody drugs in the pipeline. For example, Britain's pharma giant GSK is working with Vir Biotech to develop potential antibody. Meanwhile, in Singapore, it was reported that The Agency for Science,

Thematic Report



Technology and Research has partnered with Japanese pharma company Chugai Pharmabody Research on antibody.

Road to a vaccine

Lots of people believe that an effective vaccine is the backstop for the world to return to normalcy. In Philippines, the government said that schools will not be re-opened until a vaccine is available.

A global pandemic calls for global coordination. The vaccine search is no longer a contest. In the Global Vaccine Summit chaired by British Prime Minister Boris Johnson on 4 June for the first time in a virtual format. The Summit raised US\$8.8 billion from 32 donor governments and 12 foundations and organizations, far more than its original target of US\$7.4 billion. This is the power of unity. It took the world 43 years to get the first vaccine approved against Ebola after the deadly virus was first discovered. However, it only took about 66 days for the first two covid-19 vaccines to start the clinical trial after the SARS-CoV-2 was first sequenced.

Although we failed in the search for vaccines for coronavirus in the past 17 years, the unprecedented coordination and resource allocation this time gave us hope that we might be able to get more than one vaccine this time.

Currently, at least 135 vaccines are in development globally with at least 10 vaccines have entered the clinical trials.

Table 3: Vaccines in clinical trial					
Companies	Country	Vaccine Technology	Vaccine Name	Phase 1 Date	Note
Cansino	China	Non-replicating adenovirus five vector	Ad5-nCoV	16-Mar	The world's first phase 1 result shows tolerable and immunogenic
Moderna	US	mRNA	mRNA-1273	16-Mar	Plans to start phase 3 in July with a placebo in 30K people
Wuhan Institute of Biological Products	China	Inactivated		12-Apr	All volunteers in the trial developed antibody. The
Beijing Institute of Biological Products	China	Inactivated		27-Apr	company expects to roll out the vaccine to the public by end of 2020.
Sinovac	China	Inactivated+alum	PiCoVacc	April	Plans to start trial in Brazil in July
University of Oxford/AstraZeneca	UK	Non-replicating viral vector	ChAdOx1nCov- 19	April	Partial protection
Novavax	US	Protein Subunit	NVX-CoV2373	May	Phase 1 result expected in July
BioNTech/Pfizer/Fosu	n Germany	r mRNA	BNT162	April	
Inovio Pharm	US	DNA	INO-4800	April	Phase 1 result expected in June



Thematic Report

The Trump Administration formed "Operation Warp Speed" in May, a public-private partnership, to push the development of vaccine with a goal to have a vaccine ready by January 2021. The task force came up with an initial list of 14 vaccine candidates and expects to narrow the finalists to three to five.

Other than those 10 frontrunners already in clinical trial, there will be a few high-profile vaccines entering the clinical trial stage in the second half of 2020 including those from pharma giants Johnson & Johnson, Merck, Sanofi and GSK etc. In Singapore, Duke-NUS Medical School is also working with American biotech firm Arcturus Therapeutics on a vaccine.

Table 4: high profile candidates in the pipeline				
Companies	Country	Vaccine Technology	Vaccine Name	Phase 1 Date
Johnson and Johnson	US	viral vector	Ad26.COV2-S	Mid-July
Merck	US	recombinant vesicular stomatitis virus		later 2020
GSK/Sanofi	UK	Protein subunit		

Equitable access is the key

Chinese President Xi Jinping said in May that China will make its coronavirus vaccine a global public good once one is available. Meanwhile, the Coalition for Epidemic Preparedness (CEPI) announced a partnership with AstraZeneca to make hundreds of millions of doses accessible to those at the highest risk.

Challenges remained

As one of the front runners in this race to search for vaccine, Moderna's mRNA vaccine technology has never been used in any prior approved vaccine.

For China's non-replicating adenovirus five vector vaccine, although the phase one result showed tolerable and immunogenic result in healthy adults, one of the downsides of this design of vaccine is that the preexisting Ad5 immunity could slow down the rapid immune responses to covid-19 and also lower the peak of the responses. This means that this vaccine may not work well for those people who have been infected by adenovirus before.

During a global pandemic period, vaccine should not be a contest. We might need multiple effective vaccines to serve different groups of people for better protection while ensuring equitable access to the vaccine.



Treasury Research & Strategy

Macro Research

Selena Ling Head of Strategy & Research LingSSSelena@ocbc.com

Howie Lee Thailand, Korea & Commodities HowieLee@ocbc.com

Credit Research

Andrew Wong Credit Research Analyst WongVKAM@ocbc.com **Tommy Xie Dongming** Head of Greater China Research <u>XieD@ocbc.com</u>

Carie Li Hong Kong & Macau carieli@ocbcwh.com

Ezien Hoo Credit Research Analyst EzienHoo@ocbc.com Wellian Wiranto Malaysia & Indonesia WellianWiranto@ocbc.com

Dick Yu Hong Kong & Macau <u>dicksnyu@ocbcwh.com</u>

Wong Hong Wei Credit Research Analyst WongHongWei@ocbc.com **Terence Wu** FX Strategist <u>TerenceWu@ocbc.com</u>

Seow Zhi Qi Credit Research Analyst <u>ZhiQiSeow@ocbc.com</u>

This publication is solely for information purposes only and may not be published, circulated, reproduced or distributed in whole or in part to any other person without our prior written consent. This publication should not be construed as an offer or solicitation for the subscription, purchase or sale of the securities/instruments mentioned herein. Any forecast on the economy, stock market, bond market and economic trends of the markets provided is not necessarily indicative of the future or likely performance of the securities/instruments. Whilst the information contained herein has been compiled from sources believed to be reliable and we have taken all reasonable care to ensure that the information contained in this publication is not untrue or misleading at the time of publication, we cannot guarantee and we make no representation as to its accuracy or completeness, and you should not act on it without first independently verifying its contents. The securities/instruments mentioned in this publication may not be suitable for investment by all investors. Any opinion or estimate contained in this report is subject to change without notice. We have not given any consideration to and we have not made any investigation of the investment objectives, financial situation or particular needs of the recipient or any class of persons, and accordingly, no warranty whatsoever is given and no liability whatsoever is accepted for any loss arising whether directly or indirectly as a result of the recipient or any class of persons acting on such information or opinion or estimate. This publication may cover a wide range of topics and is not intended to be a comprehensive study or to provide any recommendation or advice on personal investing or financial planning. Accordingly, they should not be relied on or treated as a substitute for specific advice concerning individual situations. Please seek advice from a financial adviser regarding the suitability of any investment product taking into account your specific investment objectives, financial situation or particular needs before you make a commitment to purchase the investment product. OCBC Bank, its related companies, their respective directors and/or employees (collectively "Related Persons") may or might have in the future interests in the investment products or the issuers mentioned herein. Such interests include effecting transactions in such investment products, and providing broking, investment banking and other financial services to such issuers. OCBC Bank and its Related Persons may also be related to, and receive fees from, providers of such investment products.

This report is intended for your sole use and information. By accepting this report, you agree that you shall not share, communicate, distribute, deliver a copy of or otherwise disclose in any way all or any part of this report or any information contained herein (such report, part thereof and information, "Relevant Materials") to any person or entity (including, without limitation, any overseas office, affiliate, parent entity, subsidiary entity or related entity) (any such person or entity, a "Relevant Entity") in breach of any law, rule, regulation, guidance or similar. In particular, you agree not to share, communicate, distribute, deliver or otherwise disclose any Relevant Materials to any Relevant Entity that is subject to the Markets in Financial Instruments Directive (2014/65/EU) ("MiFID") and the EU's Markets in Financial Instruments Regulation (600/2014) ("MiFIR") (together referred to as "MiFID II"), or any part thereof, as implemented in any jurisdiction. No member of the OCBC Group shall be liable or responsible for the compliance by you or any Relevant Entity with any law, rule, regulation, guidance or similar (including, without limitation, MiFID II, as implemented in any jurisdiction).

Co.Reg.no.:193200032W