OCBC 1H 2023 GLOBAL OUTLOOK

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Disinflation is inevitable, but is recession avoidable?

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The 2023 outlook both looks and feels like a recession waiting to happen even if the global growth forecast is currently still lurking in the positive territory of ~2% YoY. In our second half 2022 global outlook report, the key theme was whether recession will be the end-game from the inflation battle. Standing towards the year-end of 2022, the economic and geopolitical landscape remains challenging and the near-term outlook is just as murky. Ironically, the major economies may face a synchronised downturn in 2023 but due to somewhat idiosyncratic risks, namely the aggressive frontloading of monetary policy tightening in the US, energy crisis in Eurozone, and China due to its zero-Covid strategy and property market weakness. Elsewhere, the Emerging Market (EM) economies are grappling with USD strength, fickle portfolio flows, persistent geopolitical tensions between the major powers, and separate waves of supply-side and commodity-driven inflation shocks.

The IMF, World Bank, ADB and WTO have flagged a further broad-based deceleration into 2023 with downside growth risks from multiple headwinds including the tightening of financial conditions, after paring their 2022 growth forecasts Notably, the IMF tips global GDP growth to slow from 3.2% in 2022 to 2.7% in 2023, albeit warning that countries accounting for a third of the global economy likely to see a two-quarter growth contraction and with a 25% probability that global growth will fall below 2% next year and a 10-15% probability that it will slip below 1%. The OECD is less upbeat, calling for growth to ease to just 2.2%, down from 3.1% in 2022 and a sharp moderation from the 5.9% in 2021. The WTO also projects global merchandise trade volumes will moderate from around 3.5% in 2022 to 1% in 2023, down sharply from the earlier April estimate of 3.4%, but with downside scenario caveat of as low as -2.8%. As major economies see sharply slower growth and demand conditions, import demand may stall amid the still high inflation, rising interest rate environment and sporadic Covid outbreaks. We also cannot rule out other potential curve balls in the form of more supply chain shocks, especially in commodity markets, whether due to geopolitical instability or climate disasters.

With risks tilted towards the downside, the key question is whether the potential recession risks have been sufficiently priced into the financial markets? If so, will there be possible upside surprises. This encapsulates our "darkest before dawn" story of two halves that may illuminate the 2023 outlook with 1H seeing further downside before stabilizing in the second half or towards the end of 2023. As inflation rates stabilise and gradually ease in 2023, partly due to high base effects from 2022, global central banks that had aggressively tightened monetary policy to reach restrictive territory may have to contend with weighing the trade-offs between growth and inflation more acutely. While major central bank rhetoric appears to argue for persisting in restrictive territory for interest rates for longer due to core inflationary concerns, nevertheless we may see more policy divergence once the USD strength story peaks and EM market get a breather on the yield differential and FX fronts.

To recap, the US Federal Reserve has frontloaded its monetary policy tightening with four consecutive 75bp hikes and embarked on Quantitative Tightening to reduce its balance sheet. Fed chair Powell is signalling that "the time for moderating the pace of rate increases may come as soon as the December meeting", although he caveated that the "timing of that moderation is far less significant than the questions of how much further we will need to raise rates to control inflation and the length of time it will be necessary to hold policy at a restrictive level". Other major central banks like the ECB and BOE etc are also proceeding with interest rates hikes, but we may be reaching an interesting turning point globally where market expectations that a taper or slowing of rate hikes is imminent. In particular, BOC, RBA, FOMC and even MAS have begun to consider the cumulative lag effects of earlier policy tightening and/or signal that inflation may start to peak and ease by 2H23. In contrast, PBOC and BOJ remain the outliers in terms of dovish monetary policy settings, preferring to prioritize growth since their domestic inflationary pressures are relatively manageable. As we move into 1H23, the stalling growth momentum signals may become more acute and warrant a fair degree of caution on market valuations and rising volatility amid the repricing of risk assets.

On the geopolitical front, the Russian-Ukraine conflict continues, whipsawing grain trade in the Black Sea amongst others, while North Korea continues to occasionally fire missiles. While US president Biden has finally had his first in-person meeting with Chinese president Xi at the G20 summit in Bali, Indonesia recently, the strategic rivalry over advanced manufacturing, especially semiconductors, and sticking points over other issues like Taiwan remain. Although a rapprochement is remote in the immediate future, nevertheless the resumption of working level talks and scope for cooperation in key areas like climate change remains. While Chinese president Xi has secured his third term, the US political landscape remains divided with the Republicans taking the House of Representatives and the Democrats retaining the Senate which could contribute to policy gridlock so a potential repeat of the government debt ceiling fiasco cannot be completely dismissed. Moreover, despite the lack of a "red wave" at the US mid-terms elections, former US president Donald Trump has announced that he will run for the 2024 presidential elections. While a "Cold war" analogy may be inappropriate, a fragmented or polarised world may mean a more challenging economic and policy environment in the medium term. Structurally, the China+1 diversification strategy may also have more legs to run, which could be beneficial for ASEAN economies even as it remains neutral to the US-China polarization of technology and markets.

Post-pandemic growth recovery hopes are in the process of petering out. Recession alarm bells are clearly ringing for the Eurozone and the UK. Amid the ongoing energy crisis, the Eurozone looks like it is headed into recession in the last quarter of 2022 as economic momentum has deteriorated and given its heavy reliance on Russian gas imports. The EU's GDP growth may surprise slightly on the upside for 2022 at around 3.3%, but may stall at just 0.3% in 2023. Consequently, the labour market may soften slightly with the unemployment rate rising from 6.2% in 2022 to 6.5% in 2023 before stabilising at 6.4% in 2024. So far, the shoe has not dropped due to the ongoing energy crisis amid the Russia-Ukraine conflict, but weakness is likely to emerge as the ECB continues to tighten monetary policy given it started to do so later than most of the global central banks. Still, the market pricing for the ECB's peak rate is below the 3% handle, a far cry from that perceived for the FOMC or the BOE. One important point to note is that EU inflationary pressure is mostly energy-driven due to supply-side issues like the Russian-Ukraine conflict, whereas that for the US is due to the tight labour market conditions.

The UK also experienced some market mayhem during Liz Truss' short stint in office, and the recent Autumn Fiscal Statement on 17 November 2022 suggests more pain ahead with more tax hikes now and spending cuts, albeit backloaded. Notably, household disposable incomes tipped to fall by 4.3% in the current financial year and another 2.8% in the next financial year, which would mark the sharpest declines on record dating back to the 1950s and essentially wipe out all the growth over the last eight years. The OBR said that the UK economy is already in a recession and could contract by 1.4% in 2023 before recovering to 1.3% in 2024 and 2.6% in 2025. Meanwhile, inflation has hit a 41-year high of 11.1% YoY in October, aided by energy bills, and more than five times the 2% inflation target. BOE had expected inflation to peak at 10.9%. Unsurprisingly, the BOE has reiterated that market pricing of its peak policy rate is more aggressive than expected. This is unlikely to be of much comfort for businesses which appears to be looking past the recent political drama to the worsening economic outlook and high interest rates.

For now, the US economy appears to be fairly resilient, with consumer spending still holding up well amid a tight labour market that has shown little signs of softening notwithstanding headline news about big tech companies announcing layoffs amid the global growth and demand slowdown. The recent crypto-currency fallout sparked by FTX.com also appears to have limited contagion to other asset markets. But as recent oil market gyrations suggest, investors remain very sensitised to demand-supply shifts and also to OPEC+ signals as the latter's output cuts/hikes can play a swing role amid the anticipated impact of the upcoming EU's embargo on Russian oil and also the G7 proposal to cap Russian seaborne oil prices, especially how far the gap between the price cap and the market spot price is. With energy prices "weaponised" by geopolitics, oil importing countries remain susceptible to the hard realities of energy security. As such, while the attention is mainly focused on Russia-Ukraine for most of 2022, geopolitical hotspots elsewhere will also have to factor in 2023 for its potential impact on economic resilience, cross-border trade and investment flows, transport and logistics, consumption and business decisions. Ditto for food security and cybersecurity concerns in a more fragmented and polarised world.

For Asia, the elephant in the room is China. While China's 2022 growth prospects have been beaten down so much, the base effects and policy relaxation (while the speed will be dependent on the Covid situation) could mean a more conducive environment for 2023 to see an improvement. At this juncture, repeated upticks in Covid infections that warrant stricter measures are still the norm. While a soft-landing scenario for the Chinese economy is still our base case in 2023, it is probably going to be characterised by bouts of market doubts and policymakers vacillating between relaxation and tightening to find the right balance amid the various headwinds of a weak property market, geopolitical bifurcation and fickle consumers. Consequently, we have shaded lower China's 2022 and 2023 GDP growth to 3.3% and 5.3% respectively amid the resurgence of Covid cases and the potential delayed timing of relaxation of its dynamic covid zero policy.

Given the importance of China's economy and market for Asian economies, there will be knock on impact on manufacturing, trade, investments and also confidence levels for the regional economies. North Asian economies are already feeling the heat in terms of the US-China tensions, through the US chip export ban to China, the continued blacklisting of Chinese telco and surveillance firms amongst others by the US Federal Communications Commission for instance, and heightened geopolitical tensions involving the Taiwan issue after visits by selected US office holders.

For ASEAN, the reliance on China as part of the manufacturing especially electronics supply chain, and as a key export market and important source of tourism also cannot be underestimated. With the export order pipeline quickly evaporating as major markets and the global electronics demand cools into 2023, trade and GDP growth prospects will clearly slide further in the coming months. That said, ASEAN economies are currently facing tailwinds from the improved tourism numbers with the transition to an endemic Covid environment and relaxation of restriction measures, supply chain diversification, and a relatively healthy job market and private consumption health, which is currently mitigating the pressure from a moderation in manufacturing, especially electronics momentum. Hence, while 2023 growth still looks healthy up to 3Q, the electronics downcycle may weigh on the manufacturing and electronic powerhouses like Taiwan, South Korea and Singapore.

Singapore's 2023 momentum will slow discernibly to around 2% as manufacturing/electronics falters and the services sector has to do more of the heavy lifting, even though 2022 growth is coming in faster around 3.5% as services, particularly aviation and hospitality-related services with the return of tourists and MICE visitors. MTI and MAS have signalled the Singapore economy is set to see below-trend growth in 2023. There may be a potential risk of slipping into a technical recession if the global economic and geopolitical headwinds do not subside but instead escalate.

A reversal of roles is likely. For 2022, Developed Market (DM) economies had a more challenging time navigating the rapid frontloading of monetary policy tightening (led by the FOMC) to combat sky-high double-digit type of inflation, whereas EM economies appeared to escape the worst of this from both the growth and inflation perspective. The USD was king, and we saw several key levels being breached for the Euro, GBP etc. However, 2023 may see a reversal where market attention is focused more on EM economies whose monetary policy tightening pace has lagged and if growth disappoints into 2023 due to China concerns and the manufacturing cum electronics drag. At the sectoral level, the tech sector has borne the brunt of the rising interest rate environment, but increasingly the slowing growth/recession worries will seep into the consumer discretionary sectors. Already, crude oil prices are reflecting the concern about Chinese oil demand. Many industrial companies have already guided for the demand slowdown theme. As corporate margins get squeezed and the bottom line deteriorates, earnings prospects will shade lower into early 2023.

For ASEAN, it is premature to call the peak of monetary policy tightening yet if the Fed continues to nudge its expected terminal rate higher in the interim due to persistent inflationary pressures. If capital outflows materialise based on the DM-EM divergence story, then ASEAN central banks may have to keep going with the monetary policy tightening and this could include the likes of BI, BNM etc. For MAS, both headline and core inflation will remain elevated around 6% and 4% respectively, amid domestic cost drivers ranging from GST hike, tight labour market and Progressive Wage Model adjustments, public transport fare adjustments and so forth, so a further tightening at the April 2023 MPS cannot be ruled out either.

On the fiscal policy side, there are clearly pressures to do more to help with the cost-of-living issues. For instance Malaysia's PM Anwar is already eyeing targeted subsidies for low-income groups and this is after the last administration's recently tabled budget estimated a record MYR77.7b would be spent on subsidies. For Singapore, the GST Assurance Package (which amounts to S$8 billion currently) will see every adult Singaporean receiving cash payouts of S$700-S$1,600 to help with rising costs and cushion the impact of the 1% point GST hike coming up in January 2023. The 2023 Budget may see additional benefits for lower income households and possibly even corporates like SMEs too.

The key question is whether the worst is over for the inflation scare which could precipitate a policy recalibration? If so, then bargain hunting opportunities are likely to emerge. Since financial markets are always forward-looking, once the bottom is in sight, risk appetite and recovery is likely to emerge and sustain. For now, the 2023 outlook could still fall into a story of two halves – the first half may still see bouts of heightened market volatility as investors continue to read the tea leaves and second-guess when central banks will pivot and pause or eventually cut interest rates. The second half of 2023 outlook would depend on two key determining factors – whether the Fed's terminal rate will peak closer to 5% or 6% handle and if the US growth slowdown and moderation in inflation would be significant enough for the Fed to claim victory and precipitate a policy reversal, and second when China would relax its zero-Covid strategy in a more meaningful fashion beyond the recently announced measures. These two factors could provide some upside risk to the current doom and gloom picture.

Key things to watch out for heading into 2023:

Inflation remains a perennial bugbear. Although there has been some retracement in the crude oil prices from the year-to-date highs, they remain very sticky on the downside due to resistance by the OPEC+ to accept much lower levels from the current spot prices. This was clearly illustrated by the OPEC+ decision to announce a 2 million barrels per day cut to their quota in the face of slowing demand from major economies like China. In addition, the

Russian oil price cap will take effect from 5 December 2022, with the specific price to be announced soon, may add further uncertainty during the implementation phase as it requires participating countries to deny transport services (eg. insurance, finance, brokering and navigation) for oil cargoes priced above the cap. Russia has also reiterated that it does not intend to sell oil under the price cap, so what happens if Russia tries to circumvent the rules would be up in the air. At the crux of the matter could be what happens to oil demand from China, India and Turkey which currently absorbs more than 2 million barrels per day or nearly 70% of Russia's total seaborne flows. Further uncertainty also revolves around the EU's potential exemptions from shipping restrictions in its sanctions package. A second cap on Russian oil products will also kick in on 5 February 2023. Hence, the likelihood of a stop-start Russian oil problem is likely to persist at least into early 2023.

The EU tips inflation to peak by year-end to average 9.3% for the EU and 8.5% (October: record 10.7%) for the Eurozone for 2022, and remain high into 2023 but ease to 7% for the EU and 6.1% in the Eurozone. The bulk of the adjustment will only fall in 2024 at 3% and 2.6% respectively. So, this implies that the ECB will likely keep going with their rate hikes since they were a relative latecomer to the monetary policy tightening game. So will market indigestion be accentuated when the frontrunner – the FOMC – start to pause or pivot. The November FOMC minutes already suggest that it would "soon be appropriate" to reduce the tightening pace with various officials also tipping terminal rate to be "somewhat higher" than previously expected. Moreover, the Fed staff economists have also warned that the chances of a US recession have risen to nearly 50%. This contrasts with the Eurozone where ECB officials are probably just getting started with their jumbo 75bps rate hike.

Financial market stability is crucial to the health of the global economy, especially in the face of profound uncertainties. Heightened volatility in a weak financial system can amplify shocks and remains a potential test of financial and economic resilience. With the growth of non-bank finance, the macro-prudential framework will need to be strengthened further to withstand the assault of cybersecurity threats amongst others. Thankfully, the recent FTX implosion has had limited contagion to other asset markets. Nevertheless, the inter-connectedness of the global economy and financial systems have been mostly been a boon for uplifting growth and incomes, but also exposed the risks of over-dependence and the efficiency-security trade-offs, and the need for fresh shock absorbers.

Meanwhile, there is a debt legacy overhang from the pandemic. High EM debt levels pose risks in a rapidly rising global interest rate environment as economic vulnerabilities have built up. The IIF estimates that the global debt-to-GDP ratio is approaching 350% of GDP in 2Q22 and may hit 352% by end-2022. With rising funding costs, corporate bankruptcies are set to increase while higher food and energy prices are also exacerbating existing debt vulnerabilities across many developing countries. Sri Lanka has already defaulted earlier, but about 60% of low-income countries and about 25% of emerging markets are either in debt distress or at high risk of it. While this is a slow burn affair, the UN has identified 54 developing economies with severe debt problems and is calling for debt restructuring and debt relief from the wealthy countries. In fact, some countries are supposedly spending more on debt interest payments than on health, education and social protection combined. Any market transition will therefore have to be managed carefully.

Last but not least, ESG remains a key structural driver that could and should potentially reshape the global economy. Business models need to be more focused on environment, social and governance goals and targets, even as they continue to innovate and meet new customer needs and demands. For banks, the financial risks of climate change are already at the forefront as regulators have built the topic into the stress test scenarios, while investors and asset owners are also embedding sustainable investments into their investment frameworks. The need for a standardisation of ESG definitions and reporting frameworks, available, reliable and transparent data with enhanced disclosures and alignment, the work is cut out for the months and years ago. Finance can play a key role to drive and assist in the green transition.

In summary, while the near-term economic outlook looks a little gloomy with market chatter of rising recession risks and persistently elevated inflation, there is still some room for cautious optimism. While 2022 has been a very volatile year with black swans (eg. the Russian-Ukraine war) and grey elephants (eg. the China's dramatic slowdown due to its zero-Covid strategy and over-hyped property market), the turning point may be nearing. Efforts to build energy and food security resilience will start to bear fruit and high base effects may mean that inflation will peak and gradually subside into the second half of 2023. The aggressive frontloading of monetary policy tightening may also have run its course as interest rates enter into restrictive territory. **Our baseline scenario is that the major central banks will pause by mid to late 2023** which would provide some relief for both financial markets and the real economy as business and consumer confidence taken some beating from the rapid pace of rate hikes. The market implications are that 2023 could see a story of two halves, where equity, rates and credit markets remain under pressure in the first half until there is greater clarity on the central bank's resolve and peak interest rates, while the second half could usher in a more benign market environment.

Do note that the global policy co-ordination landscape is by no means perfect, but at least the recent cluster of G20, COP27 and other high-level talks heralded in-person meetings that reinforced their commitment to strengthen cooperation in the face of a more challenging global economic and financial outlook to build a more inclusive, sustainable and resilient recovery. The meeting between US president Biden and Chinese president Xi on the sidelines of the G20 summit also could pave the way for working-level bilateral talks to restart after a hiatus. Meanwhile, China has also announced a flurry of measures to tackle the Covid policy and property market, which may further remove the tail risk of a delayed reopening and further downside growth risks from here. This is a move in the right direction, but nevertheless, the road to recovery may be arduous since it falls short of a policy pivot as yet and domestic demand and consumer sentiments remain poor. Still ASEAN economies have benefited from the tailwinds from an accelerated re-opening of their borders to overseas visitors and healthy domestic consumption. If there is the additional boost from Chinese visitors at a future date, then the momentum in aviation and hospitality-related services will be powered up further even as manufacturing momentum slows down. In addition, an effective implementation of multilateral trade agreements like the RCEP could further unleash greater benefits for ASEAN and other trade partners to strengthen supply chains, create jobs and uplift incomes at a faster pace.

GDP Growth Rates

% CHANGE YOY	2021	2022F	2023F	2024F
Global	6.0	3.1	1.9	2.5
US	5.9	1.7	0.1	1.0
Eurozone	5.3	3.0	-0.5	1.2
Japan	1.8	1.5	1.3	1.0
United Kingdom	8.5	4.2	-1.0	1.0
New Zealand	5.2	2.2	1.5	1.5
Australia	5.0	3.9	1.8	1.8
China	8.1	3.3	5.0	5.2
Hong Kong	6.3	-3.0	3.3	2.3
Taiwan	6.6	3.2	2.8	2.7
India	8.7	7.0	5.9	6.0
Indonesia	3.7	5.0	4.8	4.8
Malaysia	3.1	6.9	4.4	4.6
Philippines	5.7	6.6	6.0	6.0
Singapore	7.6	3.5	2.0	2.5
South Korea	4.1	2.6	1.8	2.4
Thailand	1.5	3.2	3.8	3.6
Myanmar	-17.9	2.0	3.3	4.8
Vietnam	2.6	7.2	6.5	6.7

Source: *Bloomberg, CEIC. IMF, OECD, OCBC Bank Estimates*

Inflation Rates

% CHANGE YOY	2021	2022F	2023F	2024F
Global	4.7	8.8	6.5	4.1
US	4.7	8.0	4.1	2.5
Eurozone	2.6	8.5	5.8	2.1
Japan	-0.3	2.4	1.6	1.0
United Kingdom	2.6	9.0	6.9	2.6
New Zealand	3.9	6.9	4.1	2.4
Australia	2.9	6.5	4.9	3.0
China	0.9	2.1	2.4	2.4
Hong Kong	1.6	1.8	2.0	2.4
Taiwan	2.0	3.0	2.0	1.8
India	5.5	6.7	5.1	4.5
Indonesia	1.6	4.3	3.4	3.3
Malaysia	2.5	3.3	2.1	2.2
Philippines	3.9	5.6	4.4	3.2
Singapore	2.3	6.1	6.0	2.5
South Korea	2.5	5.2	3.2	1.9
Thailand	1.2	6.2	2.7	1.7
Myanmar	3.6	16.2	13.3	6.7
Vietnam	1.8	3.5	3.7	3.0

Source: *Bloomberg, CEIC. IMF, OECD, OCBC Bank Estimates*

Central Bank Policy Rates

BENCHMARK RATE %	Current	2022F	2023F	2024F
US Fed Funds Rate	3.75-4.00	4.25-4.50	4.75-5.00	4.00-4.25
ECB Deposit Facility Rate	1.50	2.00	3.00	2.50
BOJ Overnight Rate	-0.10	-0.10	-0.10	0.10
BOE Base Rate	3.00	3.50	4.25	3.50
RBNZ Cash Rate	4.25	4.25	5.25	4.50
RBA Cash Target Rate	2.85	3.10	3.60	3.10
China Loan Prime Rate (1 year)	3.65	3.65	3.65	3.55
CBRC Discount Rate	1.625	1.750	1.750	1.625
Hong Kong Base Rate	4.25	4.75	5.25	4.50
BI Reference Rate	5.25	5.50	5.50	5.25
BNM Overnight Rate	2.75	2.75	3.25	3.00
BSP Overnight Reverse Repo	5.00	5.50	5.75	5.25
Singapore SORA	3.53	3.58	3.83	3.08
BOK Target Overnight Call	3.25	3.25	3.50	3.00
BOT Repurchase Rate	1.25	1.25	2.00	1.75

Source: *Bloomberg, CEIC, IMF, OCBC Bank Estimates*

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China: More shoes about to drop?

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- The weak household sentiment was the key drag on growth in 2022. Three Rs including re-leverage, re-opening and re-engagement will be the themes for China in 2023. China's property pivot will set the floor for property sectors. However, the full recovery may still take some time.
- China's move towards a science-based Covid control is positive, but the Covid flare ups in the initial stage of opening may weigh down growth. China's re-engagement with Western governments will also likely keep the tail risk in check.
- We expect China to grow 3.3% in 2022 before accelerating to 5.0% in 2023. GDP growth is likely to remain soft around 3% in the first quarter of 2023 but accelerate to above 7% on the back of reopening in the second quarter before settling around 5% in the second half of 2023 when base effect kicks in.

China's GDP growth re-accelerated to 3.9% YoY in 3Q from a Covid lockdown induced sluggish 0.4% YoY growth in 2Q. This brought growth to 3% YoY in the first three quarters of 2022. The strong external demand and infrastructure investment had offset some of the lingering impact of Covid-19 which had impacted both the demand and supply sides of the economy.

China's net exports contributed almost one third of China's real GDP growth in the first three quarters, thanks to its competitive advantage in the global supply chain. This is the highest support from external demand since China started to unveil the data breakdown from 2009. Excluding external demand, China's domestic demand only grew 2% YoY in the first three quarters. Meanwhile, infrastructure investment grew 8.9% YoY in the first ten months, up significantly from 0.4% in 2021 thanks to China's stimulus measures.

Chart 1: Net export contributed 1/3 of growth

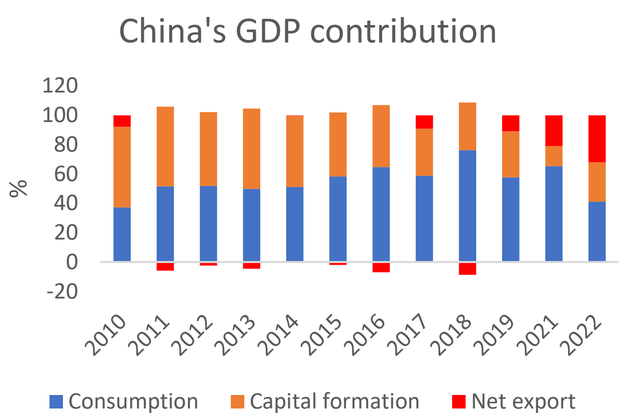
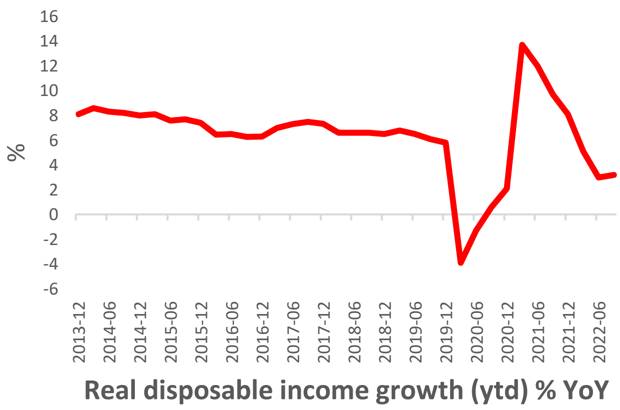


Chart 2: Income growth was weaker than expected



Source: *Wind, CEIC, OCBC Bank*

Nevertheless, the Chinese economy continued to feel the pain from the Covid-19 resurgence as the household sector took the biggest hit. Retail sales fell by 0.5% YoY in October, led by the contraction of catering sales due to the people movement controls. Excluding car sales, China's retail sales fell by 0.9% YoY in October.

The weak household sentiment was the result of multiple factors including Covid-19 concerns, worries about the property market and a gloomy outlook on job market and income growth. The growth of nominal disposable income per capita rose 5.3% in the first three quarters, below the nominal GDP growth of 6.2%. In addition, China's surveyed unemployment rate remained high at 5.5% in October, which is at the upper band of the government target.

The credit data echoed the same picture of weak aggregate demand from the household sector. Medium to long term loan to the household sector only increased CNY2.3 trillion in the first ten months of 2022, much lower than CNY6 trillion increase in 2022. However, household deposits rose by CNY5.4 trillion, much higher than CNY1.4 trillion increase in 2021. The weaker loan demand and higher propensity to saving suggests that poor household sentiment has been one of the key drags on Chinese economy this year.

Chart 3: weak household appetite for loan

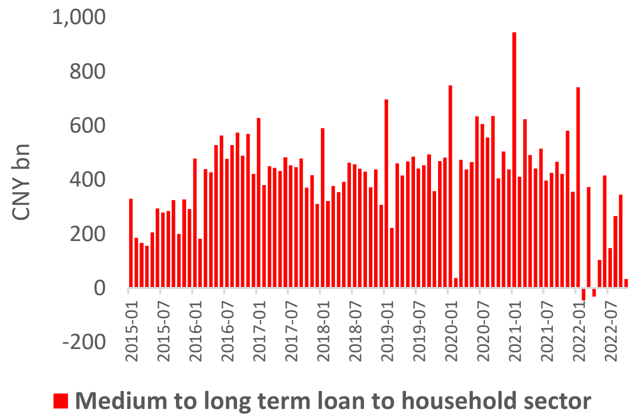
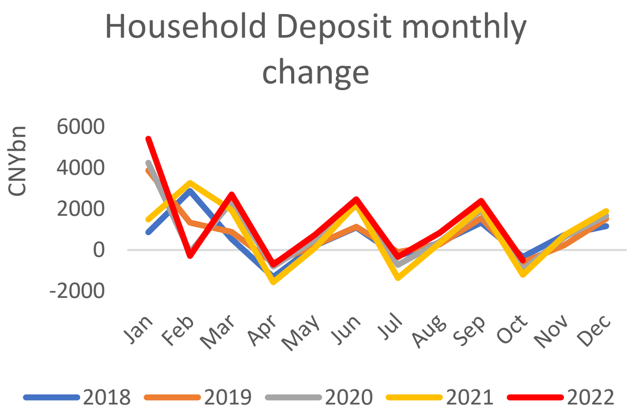


Chart 4: higher propensity to savings



Source: *Wind, CEIC, OCBC Bank*

Blowing the dark clouds away

Other than weak household sentiments, **there are three dark clouds over China's economy including the property risk, rising policy uncertainty from the dynamic zero Covid and geopolitical tensions.** Although China has stepped up its efforts to remove those dark clouds, some of those uncertainties are likely to continue to dampen the growth activities in the first half of 2023.

We think the three Rs (re-leverage, re-opening and re-engagement) will be the theme for China in 2023.

Re-leverage

China's property market is the weakest link in 2022. The contraction in property investment widened to 8.8% YoY in the first ten months of 2022.

Property sales by volume also fell by 22.3% YoY in the first ten months. Although there are signs of improvement in the funding sources for developers, the appetite for land remains weak with land purchases by volume contracting by 53% YoY as of October. In addition, land purchase transaction price also fell by 46.9% YoY YTD. Given land purchase transaction price tends to lead property investment by nine months, this implies that China's property investment is unlikely to rebound significantly in the next half year in 2023, which may continue to weigh down overall growth.

Chart 5: Land transaction price leads property investment by nine months, showing downward trend.

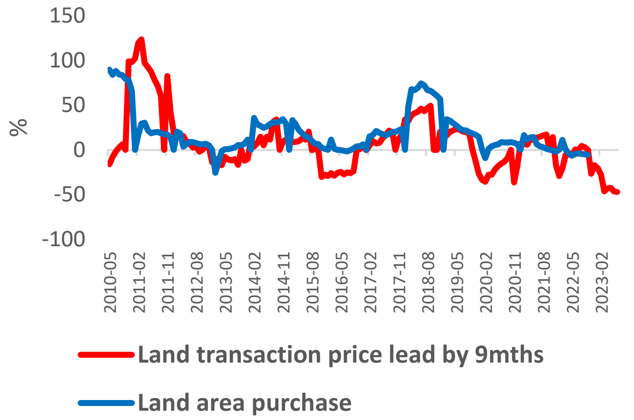
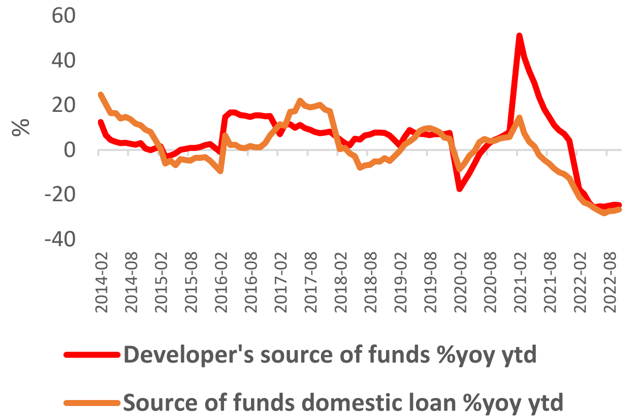


Chart 6: Signs of stabilization in developer's source of funds



Source: *Wind, CEIC, OCBC Bank*

On a positive note, China's banking regulator and central bank have issued a number of notices to step up financial supports to the property market. Notice 254 included 16 measures focusing on four areas including financial supports to the property market, financial support to deliver uncompleted projects, risk management and financial support to rental housing.

On top of the 16 measures, China's banking regulator released another notice on 14 November 2022 to allow commercial banks to issue letters of guarantee for property developers to access to pre-sale housing funds in the escrow account. The funds are allowed to be tapped for constructing projects and repaying debts. This together with the use of pledged supplementary lending (PSL) reinforced our view about China's property pivot.

The latest measures indicated China's pivot away from a restrictive housing policy to a stimulus policy. It also signaled two important changes. First, China is moving from demand side stimulus to supply side stimulus. Second, China is moving from "saving projects" to "saving both projects and developers".

China's property pivot will set the floor for the property sector. However, the full recovery may still take some time and the pace of recovery will depend on the recovery of demand.

Re-opening
As compared to property pivot, China's path towards reopening remains unclear despite the rollout of 20 measures. China unveiled 20 measures on 11 November 2022 to optimise Covid control. The optimisation is neither relaxation nor "lying flat". Nevertheless, it does show that scientific fact outweighs the political calculation.

The science based Covid control measures will help minimize the impact of Covid on the economy. Nevertheless, it is unlikely to insulate the Chinese economy from the shock given the recent Covid flares up.

The impact of re-opening talk will mainly be on sentiments in the near term. The impact on the real economy could be more mixed. The initially messy situation from the relaxation of policy may weigh on growth activities due to a sudden spike in cases while the positive impact may only be felt in the second quarter 2023 onwards after Chinese society become more mentally prepared for the eventual pivot with an increase in the vaccination rate for the more vulnerable groups.

Re-engagement
China's President Xi concluded his first week-long overseas trip in November after the 20th Party Congress and re-affirmed China's support for true multilateralism, inclusive development as well as open regional cooperation for the prosperity of the Asia-Pacific region. President Xi's packed diplomatic schedule included about 20 one-to-one meeting with global leaders in both Bali and Bangkok within a week shows China's increasing efforts to re-engage with the world. The Xi-Biden meeting was strategic and constructive. Given the Ukraine war is at a stalemate, China's re-engagement with the western governments will be likely to keep the tail risk in check.

Overall, we downgraded China's 2022 growth forecast to 3.3% from 3.5% due to the recent Covid flares up in November. We expect China's growth to remain low at around 3.5% in the first quarter of 2023 due to uncertainty from the Covid policies. As China moves towards reopening in the second quarter of 2023, growth is expected to accelerate to above 7% before decelerating again to around 5% range in the second half due to base effects. Overall, we expect China's growth to recover to 5.0% in 2023, bucking the trend for a global slowdown.

On monetary policy, after cutting both interest rates and reserve requirement ratio in the first half of 2022, China's central bank has relied more on structural monetary policy tools to support growth. China's State Councill announced to re-tap RRR to manage liquidity in November meeting after interbank funding costs rose. This showed China's monetary policy is likely to remain supportive in the near term.

Nevertheless, we think the room for further interest rate is limited in 2023 for three reasons. First, RMB's rising volatility due to monetary policy divergence in 2022 has made China's expectations management more difficult. As such, we think China may refrain from the outright interest rate cut. Second, although China may grant the green light to re-leverage in the property market, China remains alert to money market leverage given the surge of overnight repo this year. Third, PBoC also warned of inflation risks in 2023 as overall demand may pick up following the relaxation of Covid control. This may also limit the room for further interest rate cut.

On currency, RMB has weakened against the US dollar by about 11% as of late November. Although RMB outperformed its East Asia neighbours such as the Japanese Yen and Korean Won, RMB index fell by more than 4% YTD, signalling RMB has not only weakened against the dollar but against its major trading partners as well. RMB's underperformance happened against the backdrop of a record goods trade surplus and China's massive re-launch of its counter cyclical measures.

What has caused RMB depreciation in the past few months? As compared to past few rounds of RMB depreciation. There are two new parameters this time. First, the monetary policy divergence has been the main cause of RMB depreciation this year. The collapse of RMB forward points as a result of higher US interest rates and lower Chinese interest rates made China's counter cyclical measures which aim to increase holding cost of short RMB less effective this time. Second, there is also rising concerns about China's idiosyncratic risk due to China's Covid zero policy as well as concerns about spillover risks from property tightening.

Chart 7: The collapse of forward points made China's CCF less effective

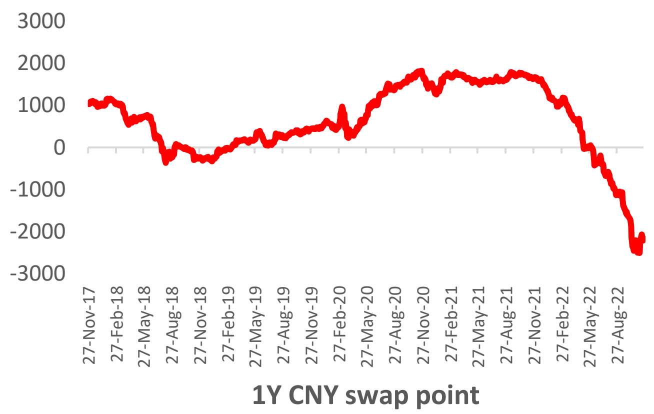
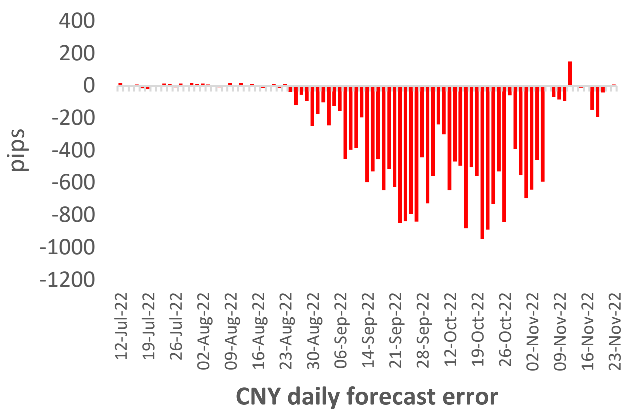


Chart 8: China is refraining from daily fixing intervention



Source: *Wind, CEIC, OCBC Bank*

In order to slow down the pace of RMB depreciation, China's central bank has restarted all the counter cyclical measures since August, such as the outsized RMB daily fixing. RMB fixing has been on the stronger side for more than two months. Nevertheless, PBoC has recalibrated its currency policy recently. In the latest monetary policy report, PBoC said market should play the decisive role in currency price discovery. This explained the normalisation of RMB daily fixing with a much lower bias.

Looking ahead, given China is likely to stay away from intervention. We think RMB will remain a function of two factors including US-China rate differentials and China's domestic policy. On a positive note, given China's recent property pivot and re-opening hopes, we think China's idiosyncratic risks have declined significantly. In addition, the limited room for China to cut its interest rate further also means the rate differential between US and China may stabilise. This will also alleviate the further pressure on RMB depreciation.

To conclude, we think the recent high of 7.35 could be the peak for this round of deprecation should the dollar index remain stable in the near term.

Hong Kong: Resilience to be tested

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- Hong Kong's economy is set to contract in 2022, the third time in the last four years. With the downside risks still exerting pressure on the economy, we have revised downward our full year forecast to a contraction of 3.0% for 2022 since the growth for the first three quarters already shrank 3.3% YoY.
- Cyclical pain had been felt at every level of the economy. Domestic demand turned weaker, which was reflected in the sluggish retail sales amid dented consumption sentiments. The slackening global growth and Covid-related logistic disruptions also dragged on Hong Kong's trade performance. Meanwhile, the tighter financial conditions, heightened volatility in asset market and the consolidation in housing property all weighed on growth in 2022.
- Hong Kong's resilience is being put to the test amidst the ongoing economic challenges. Fortunately, its fiscal position remains sound, even after the ultra-expansionary budgets in the past two fiscal years. Households also stayed resilient in the face of a property market downturn, given the strong net worth-to-liabilities and asset-to-liabilities ratio.
- Looking ahead, the pace of economic recovery will continue to depend on the timing for the Covid zero pivot. Hong Kong may see a rebound in domestic demand and business confidence on potential re-opening dividends to offset the worsening external headwinds. All in all, we see the 2023 GDP growth forecast at 3.3%.

The third economic contraction in the last four years

Hong Kong's real GDP contracted by 4.5% YoY in the third quarter of 2022, extending the declines registered in the previous quarters (1Q: -3.9% YoY; 2Q: -1.3% YoY). External demand shrank notably on the back of slowing global growth and cross-border transport disruptions, while domestic demand was weighed down by the tighter financial conditions, heightened volatility in the asset market and the consolidation in housing market. On seasonally adjusted basis, GDP shrank by 2.6% QoQ (2Q: +1.0% QoQ).

All components showed a weaker performance in the third quarter. Zooming in, year-on-year declines on exports of goods and gross domestic fixed capital formation widened notably to 15.6% (2Q: -8.4% YoY) and 14.3% (2Q: -2.1% YoY) respectively. Meanwhile, exports of services also turned to a YoY decline of 3.8% (2Q: +2.2% YoY). On the other hand, on the back of massive Covid spending, government consumption expenditure expanded again, albeit at a slower pace of 5.1% YoY (2Q: +13.0% YoY), while private consumption expenditure stayed flat as compared to a year ago.

With the downside risks likely to still exert pressure on the economy in the last quarter of 2022, we have revised downward our full year forecast to a contraction of 3.0% for 2022 (3.3% YoY in the first three quarters), slightly above government's forecast of -3.2%. Hong Kong's economy is set to contract this year, the third time in the last four years.

Chart 1: Both domestic and external demand weakened

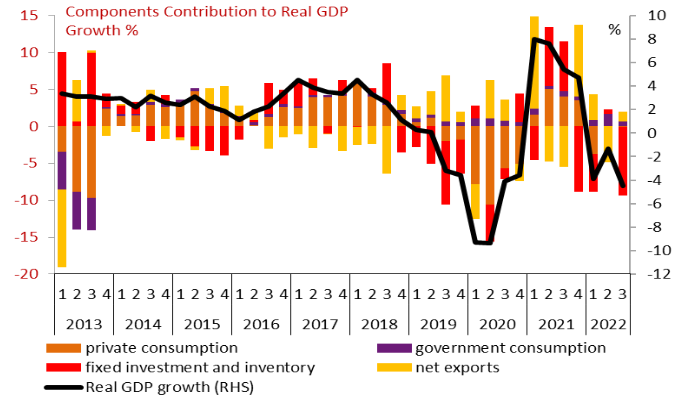
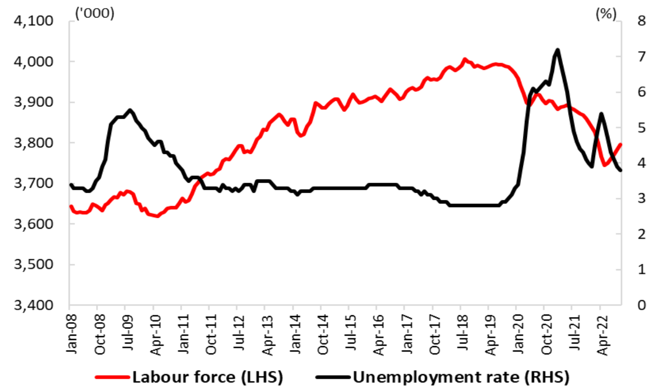


Chart 2: Shrinking labour force



Source: *HK Census and Statistics Department, OCBCWH*

Cyclical pains are mounting

Cyclical pain had been felt at every level of the economy. Domestic demand turned weaker, as reflected in the sluggish retail sales amid dented consumption sentiments. Pessimism in the business sector prevailed and the PMI has stayed in the contractionary zone since September 2022. The slackening global growth and Covid related logistic disruptions continued to drag on Hong Kong's trade performance. In the first ten month of 2022, the value of merchandise exports dropped by 4.3% YoY. Inbound tourism was stagnant, with visitor arrivals standing at only 1-2% of the pre-pandemic levels.

On the other hand, price pressures remained muted, on the back of weak domestic demand, falling rentals, modest wage pressures and broad Hong Kong dollar strength (offsetting part of imported inflation). The headline inflation rate was seen at 1.8% YoY in October, well below the pre-pandemic level.

Shrinking labour force

The sole bright spot in 2022 has been the relatively tight labour market, with the unemployment rate falling to its lowest level since early 2020 at 3.8% for the three months ending October 2022. Yet it gave little reason to cheer, as the decline in the jobless rate was partly due to the shrinking labour force. Comparing with the average figure in 2021, the total labour force fell by 74,400 (-1.9%) for the three months ending October 2022. During the same period, the total unemployed persons also fell by 52,900.

Tighter financial conditions

Against the backdrop of Fed's aggressive tightening, persistent outflows of capital were seen throughout 2022. The aggregate balance (which is a gauge of interbank liquidity) fell below HK$100 billion, to the lowest level since June 2020, in the face of multiple rounds of FX interventions. The resulting higher borrowing cost and tighter financial conditions significantly dampened the investment sentiment. HIBORs surged to multi-year highs alongside the rising Fed fund rate and LIBORs. The prime rate has been hiked by a total of 37.5bps as of late November, with further upside likely down the road as the Fed's tightening journey is still incomplete.

Chart 3: Persistent outflows of capital

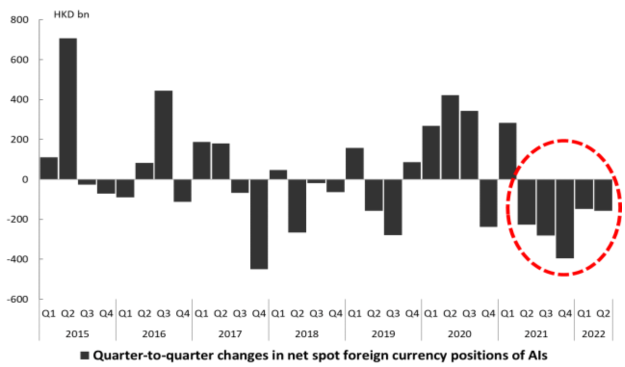
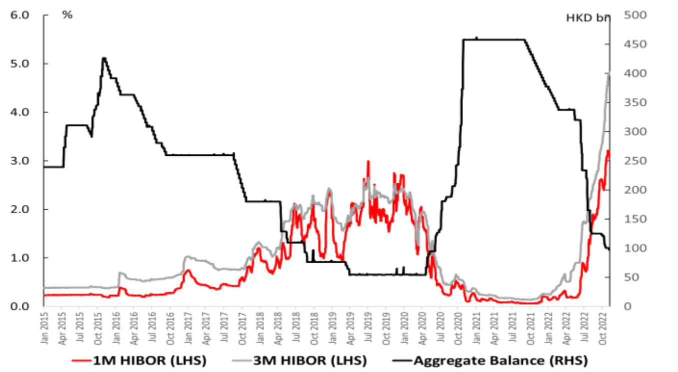


Chart 4: HIBORs surged to multi-year highs



Source: *HKMA, Bloomberg, OCBCWH*

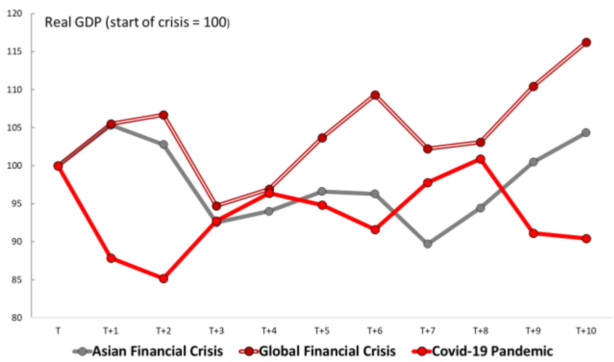
Mirroring the faltering economic fundamentals, the local asset market also underwent sharp price correction this year. The Hang Seng Index plunged by 26.1% year-to-date as of 28 November 2022. The overall residential property price has tumbled 11.5% from the recent peak in 2021. Heightened volatility in asset market and the consolidation in housing property in turn hurt the real economy further via negative wealth effects.

Resilience to be tested

Three years into the pandemic, Hong Kong's economy is still not out of the woods, rendering it the toughest economic challenge in recent history. Looking ahead, the external headwinds will likely persist, and hence put Hong Kong's resilience to the test.

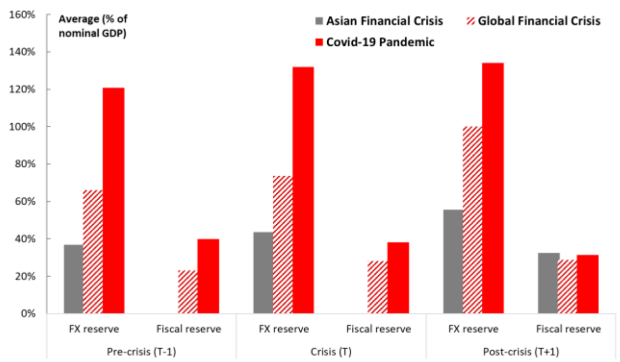
On the fiscal front, with the weaker-than-expected profits and salaries tax revenue, Hong Kong will likely see fiscal deficits of over HK$100 billion in the current fiscal year, the second highest in history and almost double the initial estimate of HK$56.3 billion in February 2022. That said, Hong Kong's fiscal position remained sound, even after the ultra-expansionary budget in the past two fiscal years. As of end-September 2022, Hong Kong government's fiscal reserve stood at HK$704 billion (24.5% of 2021 nominal GDP), comparable to the level seen in the previous crises.

Chart 5: Economic crises in recent history



Note: Start of crisis (T) is set at 1997Q3, 2008Q3 and 2020Q1 for the Asian Financial Crisis, Global Financial Crisis and Covid-19 Pandemic respectively.

Chart 6: Ample foreign reserve and fiscal reserve



Note: (1) Pre-crisis period is set at 1996, 2007, and 2019 for Asian Financial Crisis, Global Financial Crisis and Covid-19 Pandemic; (2) Fiscal reserve data are available after October 1998.

Source: *HK Census and Statistics Department, HK Financial Services and Treasury Bureau, OCBCWH*

Chart 7: Fiscal reserve dipped

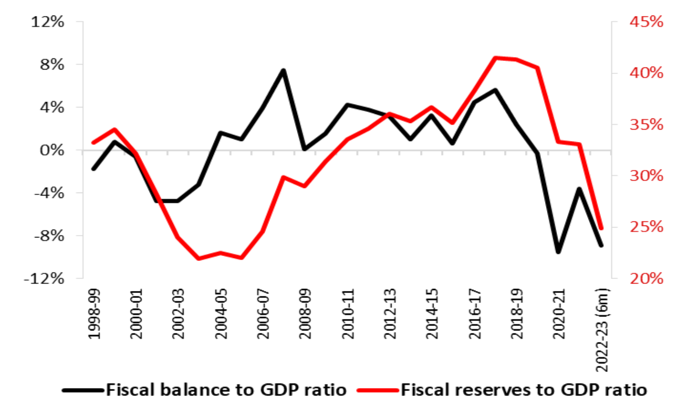
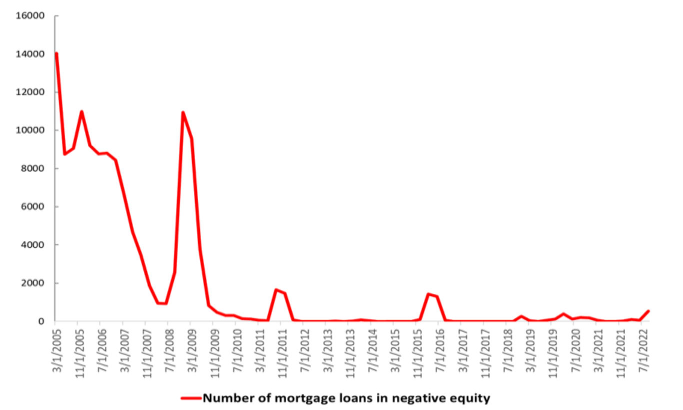


Chart 8: Number of mortgage loans in negative equity



Source: *Bloomberg, HK Financial Services and Treasury Bureau, OCBCWH*

On the other hand, household's resilience also warranted attention amid heightened volatility in the asset markets. In fact, Hong Kong households' net worth-to-liabilities ratio and safe asset-to-liabilities were elevated at 11.3 times and 2.96 times respectively in 2020, providing a sizeable buffer to any market downturn. Moreover, thanks to rounds of demand-side management and macroprudential measures, the systematic risk in the housing market remains low. The average loan-to-value ratio and debt servicing ratio of newly approved loans stayed at healthy levels of around 54% and 36% respectively. While the estimated number of residential mortgage loans in negative equity spiked up to 533 cases at end-September 2022, it remains below the levels seen during the previous housing market downturns.

Fiscal resilience

Other than the profits and salaries tax revenue, the stamp duty revenue could also fall short of expectation as the turnover of stocks and transactions of residential properties has declined significantly. The average daily turnover of Hong Kong stocks in the first seven month of this fiscal year (April to October 2022) was 27.8% lower that of last year, while total transactions of residential properties also fell more than one third. Added to that, given the ongoing consolidation in the local property market, the land premium income should come in markedly below that of estimates.

As a result, government's fiscal reserves at the end of this fiscal year may fall below HK$800 billion. Without the issue of government green bonds totalling HK$35 billion, the deficit number may look even worse. Going forward, the government will need to strike a balance between avoiding a premature withdrawal of fiscal supports that may hinder economic recovery, and maintaining a sufficient fiscal buffer.

Entrenched downturn in residential property market

The bleak economic outlook and rising interest rate had a material impact on the once resilient residential property market. The housing market downturn in Hong Kong became more entrenched lately, with the year-on-year decline in property price widening further to 11.0% in October 2022. The property price index fell back to the level last seen in 2017. Trading activities were also subdued. In the first ten months of 2022, the number of residential property transactions plummeted by 37.5% YoY. Meanwhile, the number of unsold units rose to the highest in 15 years.

The mortgage rate at 2.875% (referencing to the cap limit of P-2.5% for HIBOR-based mortgages) was notably higher than current market yield at 2.0-2.6%, hence exerting downward pressure on the housing market. To make things even worse, we expect the prime rate to increase further down the road, following the potential rate hikes by the Fed in coming FOMC meetings. In view of that, it seems the price correction for the least affordable housing market in the world has yet fully run its course. Market sentiments in the property market may stay downbeat, with little positive catalyst lying ahead. While the Policy Address announced to waive part of the stamp duties for non-locals after they have earned the status of permanent residents, it is unlikely to render much support to the housing market.

Taking into account the downside risks stemming from the rising interest rates, heightened equity market volatility and weakening global economic momentum, **we expect to see a 13% pullback in housing price in 2022, followed by a milder 5% correction in 2023**. To avoid being caught in a downward spiral of home prices that may destabilise market sentiment further, we see room in adjusting or lifting some of the demand-side management measures (say Buyer Stamp Duty and New Residential Stamp Duty) introduced during periods of market exuberance.

Nowhere to go but up for stock?

Hong Kong stock market suffered a deep selloff this year, and was among the worst performers globally. The benchmark index, Hang Seng Index, fell to 13-year low at one point. Yet, we see a sharp reversal of market sentiments since early November, amid market euphoria on the Mainland's reopening, bailout plans for Chinese property developers and encouraging developments surrounding the audit disputes over US listed Chinese companies.

Chart 9: Residential property market downturn

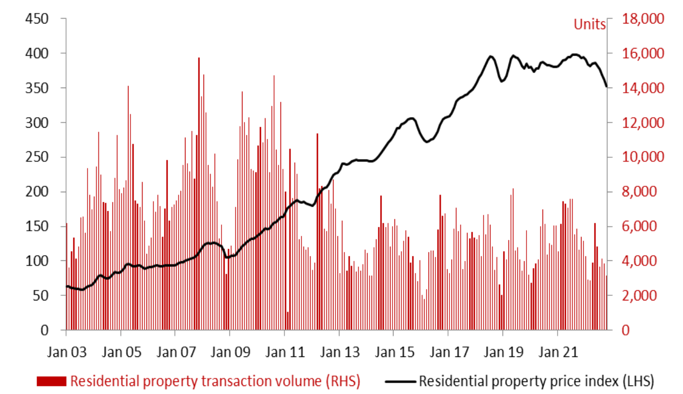
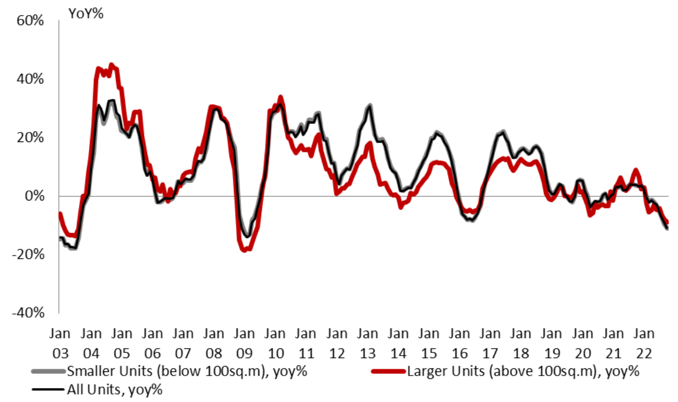


Chart 10: Property market downturn more entrenched



Source: *HK Rating and Valuation Department, Land Registry, OCBCWH*

Going forward, given that extreme pessimism had already been priced in, the reward-risk seems to be skewed mildly to the upside. Nonetheless, downside risks remain intact and should warrant caution. They include 1) a challenging macroeconomic outlook in the near term; 2) continued earnings downgrades;

3) weak investors' appetite, especially in terms of foreign funds; 4) aggressive tightening in major central banks; and 5) lingering geopolitical tensions.

Covid pivot can save the day

Looking ahead, the pace of economic recovery will continue to depend on the timing of the Covid pivot. Our base case scenario is that the quarantine-free cross-boundary travels between Hong Kong and the Mainland will resume in phases starting from the second half of 2023, and Hong Kong will gradually lift all antivirus measures and return to normalcy.

Leverage on the dividends of reopening, Hong Kong may see a rebound in domestic demand and business confidence to offset the lingering external headwinds and drag posted by tighter financial conditions. Therefore, we see the 2023 GDP growth forecast at 3.3%. However, we expect to see mild inflationary pressure at 2%, as downward pressure on rents is likely to linger. Meanwhile, the unemployment rate should edge further down to 3.6% in 2023. In a rather unlikely scenario where full-fledged re-opening was further delayed and the external headwinds escalated, we suspect economic activities may shrink further.

Indonesia: Consolidation year

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- Indonesia's growth has been bolstered by a strong post-Covid recovery in consumption and a sharp uptick in commodity exports. The latest Q3 GDP print, for one, marked a hefty upside surprise.
- Going into 2023, we expect growth to come in at 4.8% YoY, taking into account a slower global growth outlook. Apart from consumption and exports, growth will come to depend a lot more on investments, particularly as the country gears up to leverage on its considerable nickel reserves to be part of the global EV wave.
- In terms of policy, we see Bank Indonesia wrapping up its policy tightening move. Depending on how the Fed's rate trajectory will turn out to be, we see a scenario whereby Bank Indonesia might well have the space to keep its policy rate unchanged at the 5.5% level for 2023.

Indonesia's growth and policies will consolidate into 2023
Granted, the past may not be a perfect guide to the future, but seeing the uptick in some of the growth components in Indonesia should still give us a sense of how strong the momentum will be as we step into the new year of 2023.

Take Indonesia's latest 3Q2022 GDP print, for one.

Prices grew dearer and interest rates turned loftier, but Indonesia's growth powered up considerably in any case. It posted growth of 5.72% YoY in 3Q, faster than the 5.6% that the market consensus had pencilled in and miles from the more subdued 4.8% that we had in mind. On a seasonally unadjusted basis, it grew at 1.81% QoQ in 3Q, an uptick from 1.71% of 2Q.

To be sure, the GDP print did register some hits from the less-forgiving macro backdrop, especially in the domestic consumption portion. At 5.39% YoY, this segment still posted commendable growth, but has nonetheless turned more subdued relative to the 5.51% posted in the prior quarter.

Overall, however, the momentum in consumption recovery appeared to be strong enough. While energy subsidies were cut over the period, the relatively reasonable magnitude of the shift, combined with disbursement of handouts to the poor have managed to contain the damage.

Source: *OCBC, Bloomberg*

Indeed, according to the latest Retail Sales Survey by Bank Indonesia, retail sales were seen to remain solid in October 2022, with a 4.51% (YoY) growth in the Real Sales Index (RSI) to a level of 204.3. In particular, retailers expected strong growth to stem from increasing sales of Food, Beverages and Tobacco as well as improving sales of Information and Communication Equipment.

Meanwhile, the latest Consumer Survey – also by the central bank – in October 2022 indicated growing consumer confidence in economic conditions. The Consumer Confidence Index (CCI) rose to a level of 120.3 from 117.2 the month earlier and remained in optimistic territory with an index above 100. Furthermore, respondents across all spending, age, and education brackets reported a higher index – suggesting a broad support.

Given that consumption makes up the heftiest chunk of Indonesia's economy, such signals portend well for the growth momentum as we head into 2023.
Still, the more encouraging story may well be on the investment front. With reference again to the latest 3Q 2022 print as the starting point, the fixed asset investment part of the GDP grew by a good clip of 4.96% YoY, compared to 3.07% YoY of 2Q. This is likely bolstered by high investment realization rate of both domestic and foreign direct investment over 3Q.

Part of the uptick in FDI has been driven by Indonesia's pole position in some of the minerals that are in demand within the green energy transition space. For one, Indonesia holds more than a fifth of the world's nickel, a crucial component of the batteries that are used in electric cars. The only other country with such big reserves is Australia. Indonesia is also the world's third-largest source of cobalt, another vital input in the EV batteries. Indeed, the Economist magazine reckons that by 2030, Indonesia may be the fourth-largest producer of green commodities in the world, behind only Australia, Chile and Mongolia.

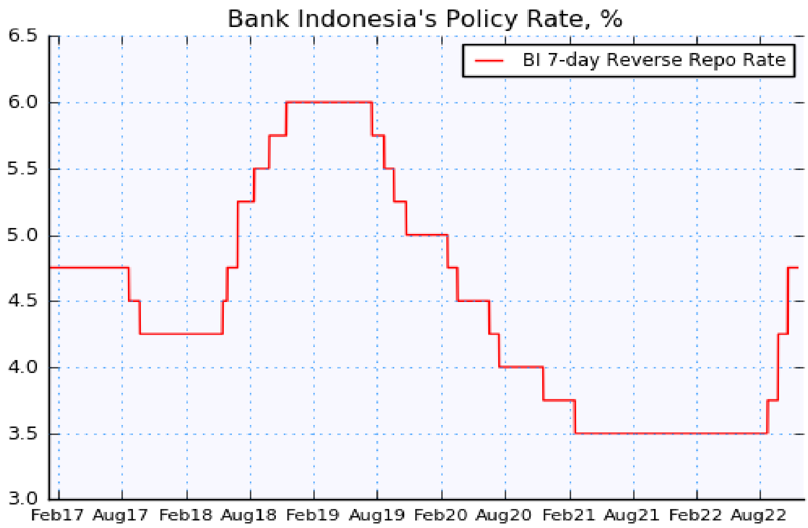
So far, Indonesia's vast nickel deposits have allowed it to gather a cumulative USD18 billion in the Morowali Industrial Park which began in 2013, for instance. The complex, which is situated in the eastern island of Sulawesi, now hosts at least 11 working nickel smelters, spearheaded by China's Tsingshan Group, the largest nickel producer in the world.

Outside of the green energy space, the government is also keen to attract FDI in other sectors. Piggybacking on the successful G20 summit in Bali, for instance, the government announced plans to turn the resort island into a health hub, by designating a 41-hectare area in Sanur as a special economic zone for health tourism.

Global health providers such as Mayo Clinic and Cleveland Clinic are reportedly interested in the project, which would help Indonesia turn the dial somewhat on medical tourism. Around 2 million Indonesians are estimated to travel overseas to countries such as Singapore and the US for treatment, spending as much as IDR97 trillion (US$6.2 billion) annually. If successful, the health hub would not only boost FDI inflow but also help to curb at least some of these spending outflows.

A combination of resilient domestic consumption and supportive investment landscape should help bolster Indonesia's growth in 2023, which we expect to come in at 4.8% YoY. While it is lower than the 5.0% that we are likely to see in 2022 due to global factors, we do not see a deep slump developing.

All in all, even as Indonesia too will inadvertently face a more foreboding global landscape next year, the fact that its major growth drivers contain significant momentum going forward should not be missed.



Source: *OCBC, Bloomberg*

Most recently, Bank Indonesia has had enough comfort zone to tweak its policy rate up by the more forceful pace of 50bps once again in November 2022 to 5.25%. Going forward, it may tone things to a hike of 'just' 25bps in December to 5.5%, depending on its perception of global FX risk factors. Depending on how the Fed's rate trajectory will turn out to be, we see a scenario whereby Bank Indonesia might well have the space to keep its policy rate unchanged at the 5.5% level for 2023.

Macau: Longing for the Covid pivot

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- The economic pains stemming from travel curbs and the Covid fallout persisted throughout 2022. Macau's GDP fell cumulatively by 27.8% in the first three quarters of the year, on the back of a significant decline in exports of services.
- Given the resumption of electronic visa issuance and packaged tours from a few mainland provinces, the pent-up demand should underpin the rebound in retail sales and non-gaming tourism sectors in the short term. Meanwhile, for the gaming sector, it will likely take longer to spring back on the account of China's slowing growth and the crackdown on cross-boundary gambling activities.
- Economic diversification would be led by the gaming sector in the future, with each bidder for the gaming licenses probably committing over MOP100 billions of investment on the non-gaming elements during the 10-year concession period.
- The risks facing Macau's economy are still overwhelmingly tilted to the downside. Hence, we cut Macau's 2022 GDP forecast to -30% YoY, and tip the growth forecast in 2023 at 35% YoY from the low base. Judging by the current trajectory, it would likely take a few years for the economy to return to the pre-Covid level.

Economic pains remain persistent

2022 was once again a challenging year for Macau as a regional gambling hub that is struggling to bring in tourists and gamblers in the face of stringent Covid travel restrictions and case resurgence. The economic pains stemming from the travel curbs and Covid fallout persisted throughout 2022.

In the third quarter of 2022, Macau's GDP plummeted by 33.4% YoY, extending declines in the previous quarters, albeit at a slower pace due to the low base effect. The economic contraction during the quarter was largely due to local Covid outbreaks which resulted in a city-wide lockdown in July. Exports of services recorded a sharp year-on-year decline of 46.7%, as exports of gaming services and tourism services plummeted by 72.5% YoY and 45.9% YoY respectively. On the back of Covid restrictions and weak travel sentiments, the number of visitor arrivals dropped significantly in the third quarter by 50.8% YoY.

Year-on-year decline in domestic demand also widened to 13.7% in 3Q. Within the total, the private consumption expenditure and gross fixed capital formation recorded deeper declines of 13.3% and 34.3% respectively as compared to last year. The authority attributed the declines to "relatively static" control measures in July and reduced investment by gaming enterprises. Meanwhile, public consumption expenditure rebounded by 5.7% YoY, on the back of increased healthcare subsidy scheme and Covid related spending.

Macau

Chart 1: Economy contracted further

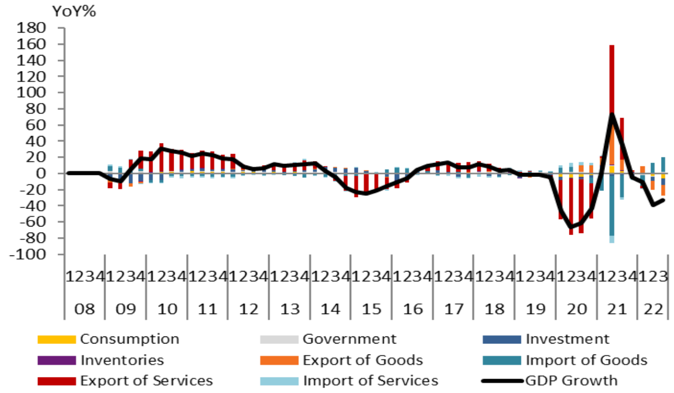
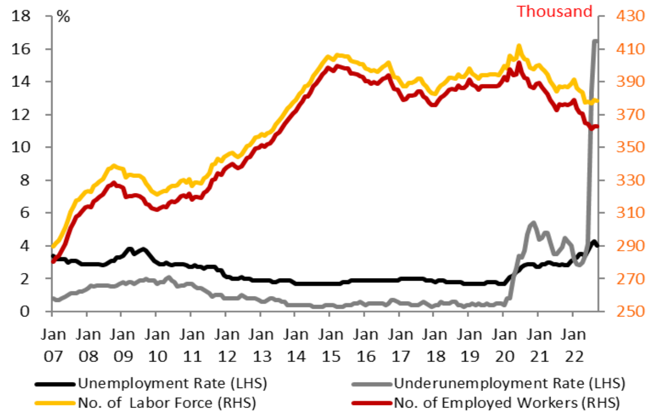


Chart 2: Unemployment rate rose to decades high



Source: *DSEC, OCBCWH*

Labour market under acute stress

Macau's labour market deteriorated notably during the citywide lockdown in July, before showing signs of stabilisation of late. In the three-month period ending August 2022, the unemployment rate rose to the highest level since 2004 at 4.3%, while the underemployment rate reached a record high of 16.5%. Many casino employees were placed on unpaid leave or partially paid leave due to the challenging operation environment. The local resident unemployment surged to 5.2%, piling further weight on the already-weak consumption sentiments. In parallel, employment earnings came under pressure. The median employment income fell from the pre-pandemic level of MOP17,000/month to MOP14,000/month in the third quarter this year, the lowest level since 2014.

After the exodus of non-resident workers in the last couple of quarters, the total labour force and employed population stayed largely stable at 378,200 and 363,000 respectively in 3Q2022. The employed population working for the hotel and restaurant sectors and the gaming sector continued to decline by 6.2% and 4.6% respectively as compared to the second quarter of 2022, while that for the wholesale and retail sale sectors rebounded by 3.6%. Going forward, we expect to see a further recovery in labour market in coming quarters, albeit in a gradual and uneven manner, barring any resurgence in Covid cases.

Covid rules relaxed but far from enough

Macau switched to a "5+3" quarantine model for non-mainland arrivals in early November, aligning with that in the Mainland China. The 7-day mandatory hotel quarantine was cut short to 5 days for visitors arriving from Hong Kong, Taiwan or overseas. Afterwards, they are required to observe an additional three days of health monitoring period, with an imposed "red" electronic health code to limit movement. Regardless, as Macau still holds the world's strictest border control, we do not expect the non-mainland visitor arrival figures to return to anywhere near the pre-pandemic level, unless a full-fledged reopening is rolled out.

Chart 3: Visitor arrivals fell notably

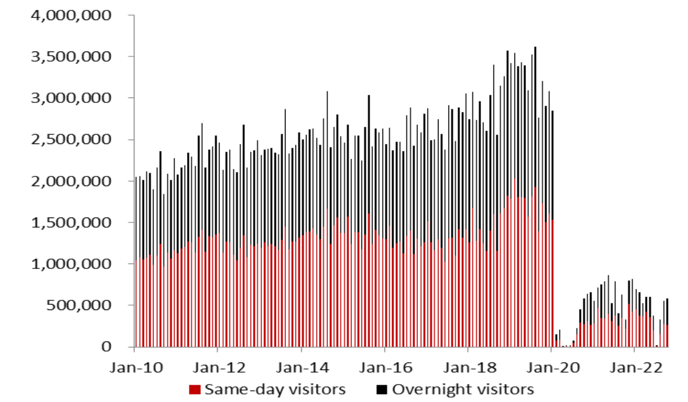
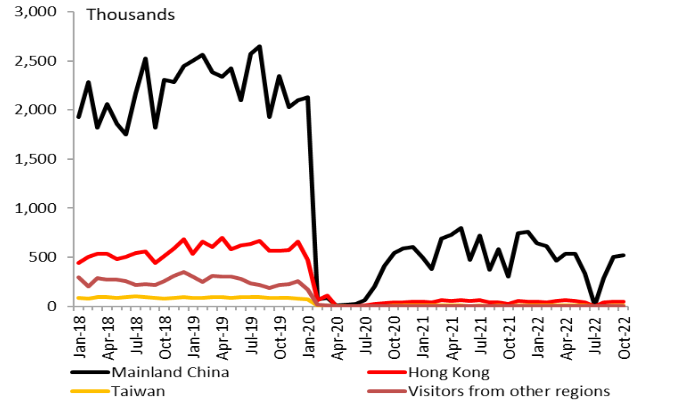


Chart 4: Heavy reliance on the Mainland market



Source: *DICJ, Bloomberg, OCBCWH*

Over-reliance on the Mainland market

Due to a Covid flare-up in Macau and the weak cross-border travel sentiments, visitor arrivals fell noticeably by 18.7% in the first ten months of 2022 as compared to that in 2021. In particular, during the July lockdown, the monthly figure sank to the record low of 9,759. The long-standing problem of over-reliance on the Mainland market was amplified by the government's border measures which prioritizes quarantine-free travel with the mainland over the rest of the world. Visitors from Mainland China accounted for over 90% of total arrivals in 2022 so far, markedly above the pre-pandemic level of around 70%. In turn, Macau's service industry became even more vulnerable than it already was to the macroeconomic environment and regulatory settings in China.

Gaming sector remains beaten down

Macau's gaming sector was brought to its knees amid the Covid outbreaks and increased regulatory scrutiny. In the first ten months of 2022, the gross gaming revenue plummeted by 50.5% YoY, and was down by 86% comparing with the equivalent period in 2019. Meanwhile, the junket-led VIP business continued to shrink in both size and share, accounting for merely 20.8% of total gaming revenue in the third quarter of 2022 against that of 43.9% in 2019. Shares of casino operators were well below their valuations back in 2019 on the account of disappointing earnings prospects.

According to the Macau government's latest forecast, total gross gaming revenue in 2023 is estimated at MOP130 billion (monthly average at MOP10.8 billion, around three times the average in the first ten months of 2022). Contrary to the government's upbeat forecast, we expect the gaming sector will continue to face lingering cyclical and structural pains as a result of China's slowing growth and crackdown on cross-border gambling activities.

Chart 5: Subdued gaming revenue

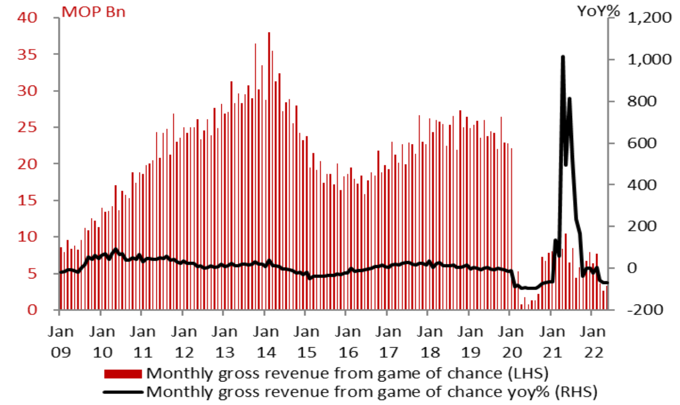
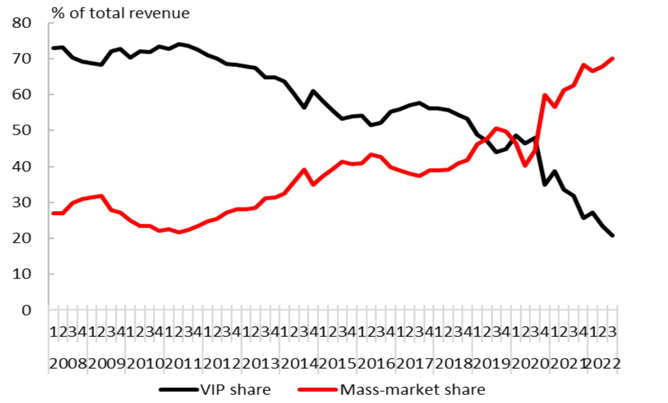


Chart 6: VIP segment shrank in both size and share



Source: *DSEC, OCBCWH*

Gaming sector led structural diversification

In the quest to diversify the city's economic structure, Macau government had their eyes set on the gaming sector. Instead of committing billions of capital spending on gaming and hotel facilities, the gaming industry practitioners are now expected to increase their operating expenditure to support and enhance the non-gaming tourism sector. Reportedly, bidders for the gaming licenses will have to invest as much as MOP100 billion during the 10-year concession period. The committed investment will fund international events as well as small-scale events (eg. film festivals and parades) hosted in collaboration with local associations and is expected to bring in more leisure tourists and boost non-gaming revenue. With a steady flow of tourists, there may also be a positive spill-over to the gaming revenue.

Complementing private sector's effort, the government will also help line up large-scale sport events (such as the Macau Grand Prix and the Macau International Marathon) to build Macau's unique brand and promote sustainable tourism.

Takes longer to spring back

With the high vaccination rates and short incubation periods of Covid variants, we should continue to see phased re-opening for Macau in the periods ahead, though the city will still have to balance between reviving the local economy and limiting the virus risks. The reopening policy may flipflop in a similar manner to what we have seen in the last three years, depending on the overall caseload. That said, we expect the Macau government to act swiftly and decisively in relaxing the border measures if and when the mainland's Covid stance pivots.

In the short term, given the pent-up demand, we should see a rather healthy rebound of retail sales and non-gaming tourism sectors when all antivirus measures are lifted. Meanwhile, for the gaming sector, it will likely take much longer to spring back on the account of China's slowing growth and crackdown on cross-boundary gambling activities. Based on the long-term growth trend, it will likely take years before the revenue generated from the mass and premium mass markets fills the void in the VIP segment.

The 2023 outlook

Looking forward, the pace of economic recovery ultimately hinges on how soon Macau can lift its travel curb and welcome the much-missed tourists. The risks facing Macau's economy are still overwhelmingly tilted to the downside, as a Covid policy pivot remains rather distant and global travel demand remains dented by the slowing economy.

We expect a slow and uneven recovery in the periods ahead, even as inbound tourism is set to benefit from resumption of e-visa and mainland packaged tours. To add impetus to the weak recovery, the expansionary fiscal setting is unlikely to exit the stage next year. The labour market should see some improvement, in particular in the retail sales sector. We expect the unemployment rate to fall to around 3.1% in 2023, down from that of 3.6% in 2022. We cut our 2022 GDP growth forecast for Macau to around -30% YoY, and tip the growth forecast in 2023 at 35% YoY from the low base. Judging by the current trajectory, it would likely take a few years for the economy to return to the pre-Covid level.

Malaysia: New beginning

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- We have held the view that Malaysia's consumption may be slowing down, as the post-Covid rebound has been in part financed by EPF withdrawals that may not be sustainable. The upside surprises thus far in GDP prints in 2022 suggest that we have been too bearish, compelling us to upgrade our 2022 growth outlook from 5.7% to 6.9%.

- Going forward, however, the consumption support might not be as robust in part due to how the manufacturing sector will be weighed down by a downturn in global exports, especially in the semiconductor space. We see growth coming in at 4.4% in 2023.

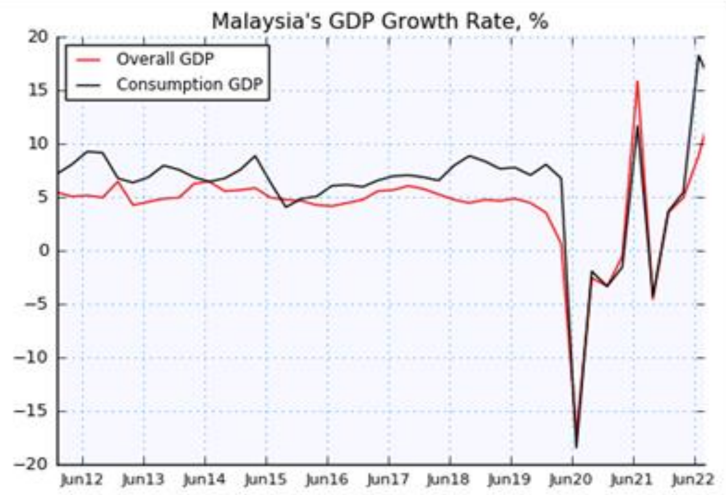
- While the new government is in place, the specifics of the fiscal policy remain an unknown although the broad contour of it is likely to remain expansionary. Meanwhile, we expect Bank Negara to hike by 25bps each in the Jan and Mar 2023 meetings due to lingering inflation pressure, but to pause thereafter due to the slower growth outturn.

Malaysia's growth prospects amid shifting political winds

The year 2022 has turned out to be a largely fortunate one for Malaysia in terms of economic recovery momentum. Indeed, we had revised our 2022 growth forecasts for Malaysia's GDP for 2022, from 5.7% YoY previously to now 6.9%. The uptick is largely predicated on the Q3 GDP outturn, which came in at 14.2% YoY, compared to our expectation of 12.5%, suggesting further uptick in momentum for the rest of the year and some support into 2023, as well.

At 15.1% YoY, the private consumption growth did slow down somewhat in 3Q, compared to the 18.3% growth posted in the prior quarter. However, there remained considerable strength, that is helped in part by the country's still-robust employment. The unemployment rate dipped further to 3.7% in 3Q 2022, a full percentage point lower than the same period in 2021, for one.

The details from the latest 3Q2022 GDP release signal that our concerns about consumption slowdown due to the relatively high household debt level and depletion of EPF statutory retirement funds, may remain well within the gestation period and may not be manifesting clearly in the near term yet. However, the underlying issue of potential under-funding of retirement accounts is likely to continue to be a considerable risk factor, underpinning our generally more cautious outlook for the economy in 2023.



Source: *OCBC, Bloomberg*

Elsewhere, for now, Malaysia's growth has been supported by continued strength in the exports sector. Even as we remain cautious of the potential headwinds posed by the global semiconductor sector's slowdown, Malaysia's external sector has seen robust outturn still, with growth of 23.9% YoY in 3Q2022 compared to 10.4% in the prior quarter.

Similar to our concerns about the longevity of the consumption boom, however, we think it is worthwhile to strike a more cautious note on the export outlook in 2023. This is especially so given the continued downdraft in the semiconductor sector. While Malaysia's role in the testing and packaging part of the value chain, rather than the initial production side, may shelter it somewhat and with a time lag, the effect might come forth more strongly in 2023, especially if the down-cycle is prolonged.

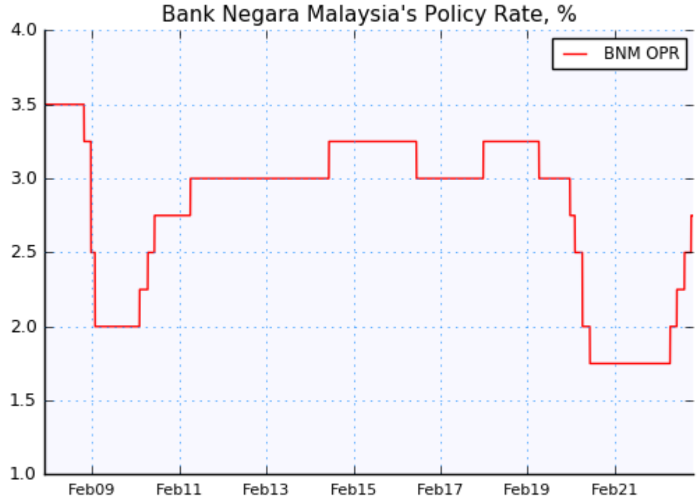
Such cautiousness with regard to the 2023 outturn for both consumption and exports cycles underpins our view that the GDP growth overall is going to shift to a lower gear and come in at 4.4%, lower than the likely 6.9% in 2022.

The slower growth will present Malaysia's new government a more challenging landscape, as well.

At the time of writing, while Anwar Ibrahim has officially been sworn in as the country's 10th Prime Minister, his broader policy framework remains unclear. It is likely, however, that given the perceived thinness of the margin of support that his Pakatan Harapan coalition has, his government will have little choice but to pursue a relatively loose fiscal policy.

On the expenditure front, we are likely to see a suite of budget measures aimed at relieving the population of cost-of-living upticks, including via cash handouts. The prospect of subsidy cuts for fuel and food purchases looks to be dim as well, at least in the near term.

On the revenue side, the classic policy choice of whether to reinstate GST will come to the fore too, as the need to lessen the dependence on oil-related revenues remains perennial. Various PH officials had been rather adamant about not adopting GST before, but fiscal reality when it gets back into power might change things.



Source: *OCBC, Bloomberg*

In the meantime, on the monetary policy side, concerns about inflation are likely to persist going into 2023, even if on a year-on-year basis the headline numbers might not be as bad. On a relative basis, the likelihood of subsidy cuts might have been reduced with the new government in power, but it would remain one of the key risks that Bank Negara would have to countenance. Hence continue to see the risk that the central bank may have more compulsion for rate hikes.

Set against the relatively strong economic backdrop for the past few quarters, we see it tweaking rate up to 3.25% in Q1 next year, rather than 3.0% as per before. In other words, it is thus likely to hike by 25bps each in the January and March 2023 meetings.

We see BNM on pause thereafter, however. While the near-term growth looks rosy enough, Malaysia is unlikely to be unscathed in any sharp global slowdown that we may see in the coming year.

Myanmar: Conflicted under pressure

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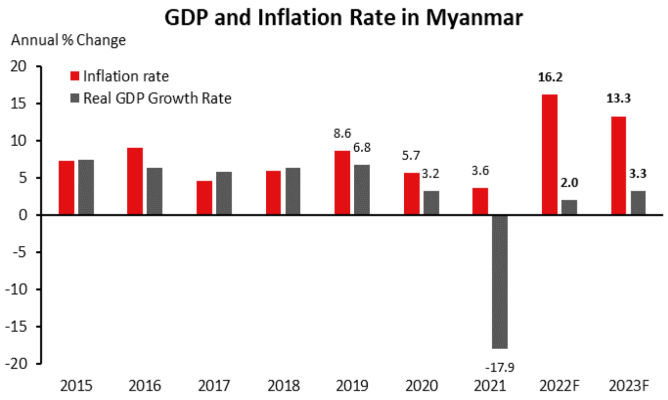
- With one of the weakest economic recovery rates seen in Asia, Myanmar is expected to grow by just 2.0% in 2022, following a 17.9% contraction in GDP in 2021. Although monthly railway traffic suggest that freight volumes have gradually been recovering, a bigger growth boost for the Myanmar economy may only come in tandem with China's stronger growth recovery when it relaxes its zero Covid strategy.
- Both consumer and business activity are likely to remain weak in the interim as internal instability and external headwinds continue to cloud its growth prospects. 2023 growth may pick up to around 3.3%, but remain below where it was pre-2021.
- Jarring long-term challenges linger for Myanmar, as it faces ongoing conflicts, power supply disruptions and policy reversals.

Rebound in economic activity remains weak amid political crisis.
According to IMF estimates, Myanmar's GDP is expected to grow by just 2.0% in 2022, after a deep contraction of 17.9% last year. This marks a relatively weak recovery as compared to its ASEAN counterparts. In particular, industries more reliant on domestic demand are facing challenges from lower household incomes and rising inflation, while agriculture is also constrained by input inflation, transport disruptions etc. That said, some firm activity has improved somewhat in 2022 compared to 2021, especially for the manufacturing and export sectors. Construction activity has also picked up as some projects have resumed after a prolonged pause.

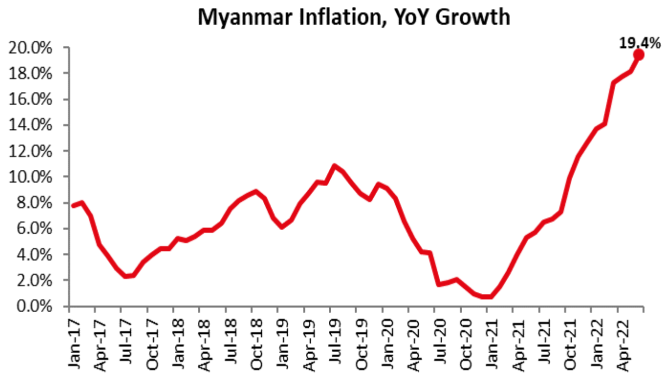
Meanwhile, inflation has continued edging upwards ever since it hit double-digits in November 2021. The latest print available showed inflation hit 19.4% YoY in June 2022, with all CPI components seeing a broad-based increase in prices. The Russia-Ukraine conflict has sent food and energy prices sky-rocketing this year, and Myanmar especially, has not been let off the hook given its dependency on imported raw materials for production. As such, there has been a broad-based pass-through, resulting in high production costs to goods and services, with inflation for all components of CPI seeing double-digit increases in June 2022. In particular, on a year-on-year basis, transport prices have led the rise, posting a glaring acceleration of 56.6% YoY in June due to elevated fuel prices.

As such, on the demand front, high living costs have caused households to pare back on spending. Given that IMF estimates show that inflation will likely remain elevated at 16.2% in 2022, consumer spending is likely to remain weak, which will translate into a weak recovery in GDP growth. The World Bank estimated that poverty may have doubled compared to March 2020, with about 40% of the population living below the national poverty line in 2022, marking nearly a decade of progress on poverty reduction undone.

Myanmar

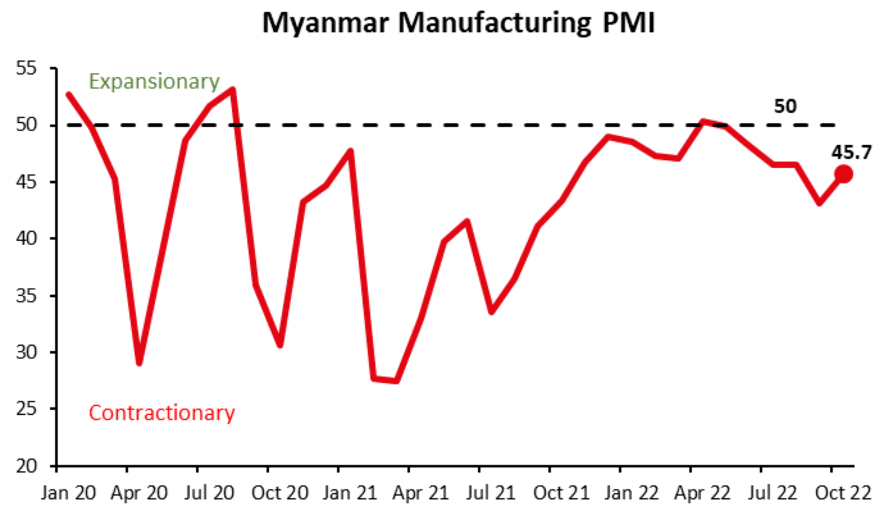


Source: *IMF Estimates, OCBC*



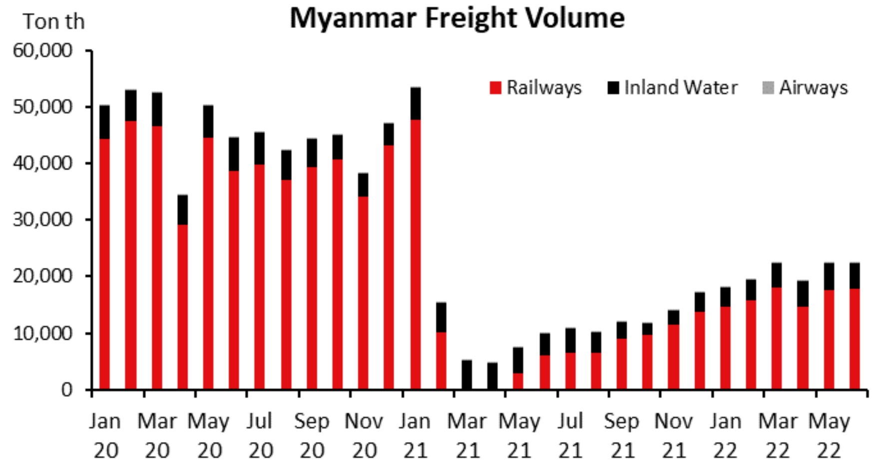
Source: *CEIC, OCBC*

Economic weakness is very apparent. Manufacturing activity has generally been entrenched in the contractionary territory ever since the Covid pandemic and political coup materialised. The manufacturing PMI came in at 45.7 in the latest October 2022 data release. A combination of internal and external factors are responsible for this persistently poor manufacturing performance. Internally, ongoing conflicts in many parts of the country have limited production activity and caused damages to key infrastructures. Persistent logistics and financial sector disruptions also added to the domestic challenges. Externally, high global inflationary pressures have caused the costs of imported inputs to remain elevated, squeezing the profitability of business production activities. Given that the ongoing conflict in Myanmar is likely to persist, manufacturing activity will most likely continue to be subdued in the short term.



Source: *Bloomberg, OCBC*

While monthly railway traffic suggest that freight volumes have gradually been recovering, a bigger growth boost for the Myanmar economy may only come in tandem with China's stronger growth recovery when it relaxes its zero Covid strategy. Otherwise, given that both consumption and manufacturing activity are not expected to improve in the near term, we expect the fragile conditions of the economy to persist and thus limiting its extent of recovery to pre-pandemic levels.

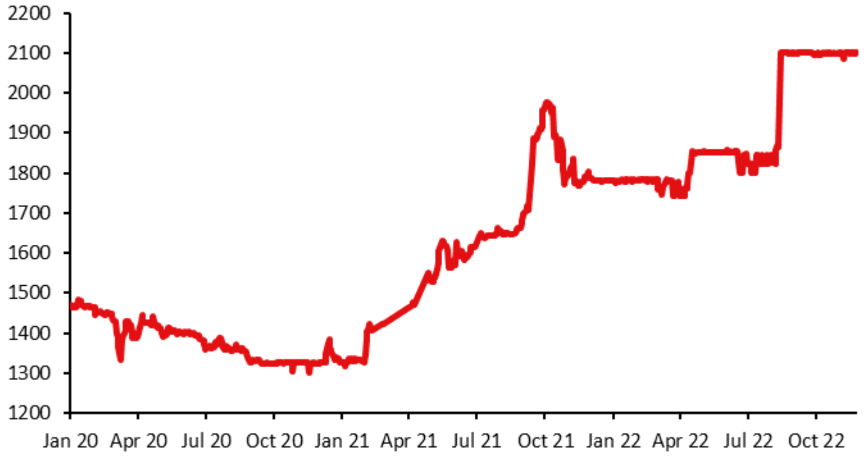


Source: *OCBC, Bloomberg*

Disruptions to power supply poses a near-term threat.
Frequent power outages resulting from damage to power infrastructure, low water levels in hydropower reservoirs and departure of overseas energy companies due to the unstable political environment, have been disruptive to business operations. Repairing infrastructure damage and obtaining enough investment capital to increase power generation capacity will likely take time given that investment inflows have not been particularly lofty since the political coup in 2021. As such, disruptions to power supply will likely remain a long-term problem, weakening the economic operating environment of Myanmar.

Policy reversals may weigh on long-term economic prospects.
According to the World Bank, the authorities have replaced its previous managed floating exchange rate system with a fixed reference exchange rate that is overvalued relative to supply and demand. However, in the long run, this will reduce the export-competitiveness of export-intensive sectors and possibly limit Myanmar's potential growth. This coupled with the imposition of foreign currency surrender rules have contributed to shortages of key imported inputs and inhibited exporters. The balance of payments situation is likely to deteriorate amid the USD shortages. Recent policy shifts coupled with rapid issuance of new policy instructions also add to the uncertainty among businesses.

Myanmar Kyat Spot Currency



Source: *OCBC, Bloomberg*

For 2023, the growth outlook remains weak with significant risks from elevated imported inflation for food, fuel and other key inputs which could constrain business activity and private consumption. Inflation may also sustain in the double-digit realm in 2023 even if its subsidies slightly from 2022 levels.

Philippines: Possible pullback in current growth momentum amid rising interest rates

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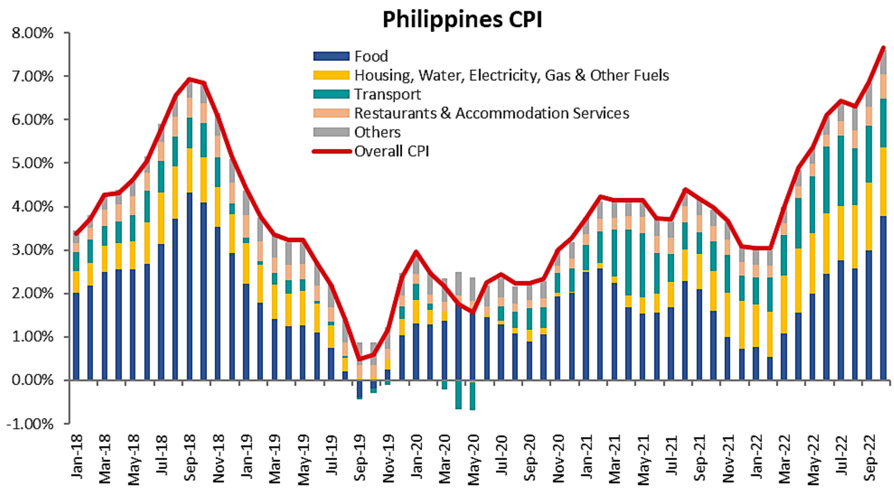
- Philippines is on track to notch a strong GDP print for 2022 as consumption has rebounded strongly on the back of pent-up demand and the return of tourists into the country.
- However, challenges such as inflation, rising interest rates due to central bank tightening and a weakening Peso may weigh on consumption expenditure, limiting the continued upside to growth in 2023. BSP Governor Medalla anticipates slow growth in 2023 but not a recession per se. Our growth forecast is for a moderation to 6.0% in 2023, down from 6.6% in 2022.
- We expect the BSP to deliver further rate hikes as it sought to bring down decade-high inflation and track the Fed's rate hike movements. BSP has already hiked its overnight borrowing rate and standing overnight deposit facility rate to 5% and 4.5% as of 17 November 2022.

Robust growth bolstered by a strong rebound in consumer demand
A huge beneficiary of the post-pandemic reopening story, the Philippines economy has staged a strong recovery since it lifted its Covid restrictions. Consumption expenditure has been a key driver behind this. Year-to-date, the Philippines economy has expanded by 7.7% YoY from Jan-Sep. Despite rising costs of living, household consumption expenditure remained surprisingly resilient, surging by 8.9% YoY from Jan-Sep, and 8.0% YoY in the latest 3Q GDP print, possibly fuelled by pent-up demand and the return of tourist arrivals following 2 years of lockdown. In particular, spending in discretionary items – recreation and culture (+31.4% YoY), restaurants and hotels (+29.0% YoY) and transport (+20.0% YoY) – grew the most on a year-on-year basis in the first three quarters of 2022.

However, it remains to be seen if this upbeat momentum in spending will continue to sustain as elevated inflation and high borrowing costs driven by aggressive central bank tightening, may cause consumers to pare back on spending. For now, we can see growth cooling slightly from is recent peak of 8.2% YoY in 1Q22 to 7.5% YoY in 2Q22 and 7.6% YoY in 3Q22. 2022 growth is forecasted at 6.5-7.5% by the Development Budget Coordination Committee. Our forecast is for 6.6% GDP growth in 2022 before easing to 6.0% in 2023 amid the global economic headwinds and as aggressive monetary policy tightening by the BSP weigh on domestic growth drivers.

Source: *OCBC, Bloomberg*

Inflationary pressures remain persistent.
Inflation proved to be sticky as it increased consistently over the past few months with no sign of peaking. Philippines' CPI averaged 5.4% YoY from Jan-Oct, with the highest print of 7.7% YoY being posted in October 2022, marking the fastest pace of increase since December 2008 during the Global Financial Crisis. This is also marked the seventh consecutive month inflation has breached the BSP's inflation target range of 2-4%. In particular, transport, housing and utilities, and food & beverages led the gain in inflation due to high energy and food prices globally, averaging 13.1% YoY, 6.3% YoY and 5.6% YoY in the first 10 months of 2022. That being said, the increase in price was broad-based across all categories of goods and services.



Source: *OCBC, Bloomberg*

Not to mention, high import costs exacerbated by the weakened Peso, which has been one of the worst performing Asian currencies YTD (weakening 12.4% against the dollar since the start of 2022) due to the widening interest rate differential between BSP and other major central banks, only piled on to the persistently high inflationary pressures. Inflation could hit 5.6% in 2022 before easing to 4.4% in 2023 and eventually return to the 2-4% target range only in 2024.

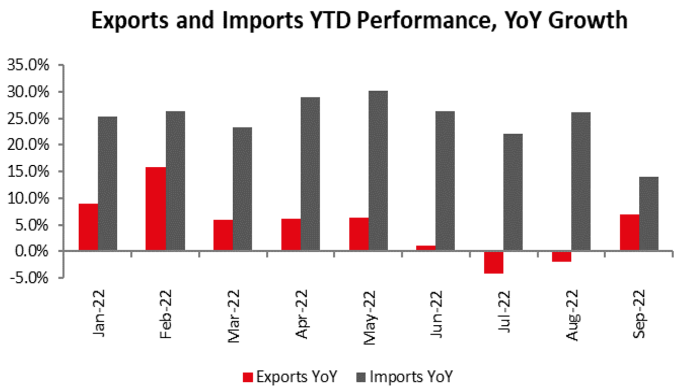
BSP likely to hike further, tracking the Fed rate movement.

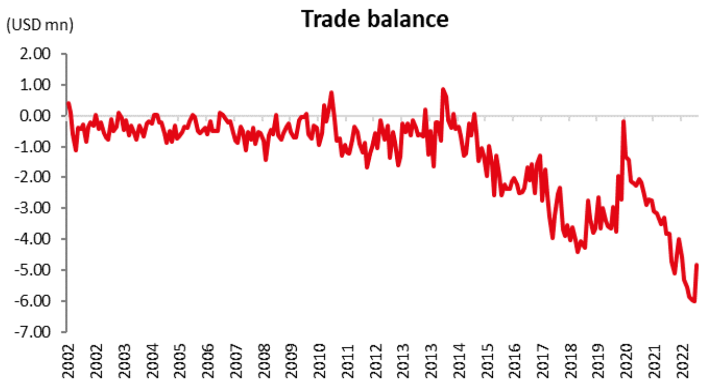
In order to rein in the high inflation back to its 2-4% target, and support the weakening Peso, the BSP has hiked a total of 300bps YTD from 2.00% to 5.00%. This makes it one of the most hawkish central banks in the ASEAN region. We expect the BSP to continue delivering further rate hikes, tracking the Fed's rate movement to provide support for the weakening Peso as well as bring inflation back to target. While there is a mild risk that the BSP may hike slightly less than the Fed, given our Fed profile itself is not the most hawkish, we expect BSP to raise its overnight borrowing rate by 50bps to 5.50% in its December meeting, and another final 25bps hike in 1Q23 to 5.75%. BSP Governor Medalla has signalled he is ready to slow the rate hike pace and turn more data-dependent as domestic inflation is tipped to slow to the mid-point of the 2-4% target range by the second half of 2023. Despite the peso's underperformance, he also said they are unlikely to change the limits on banks' foreign exchange position as it prefers to use "moral suasion" and tweak reporting requirements to manage currency volatility instead.

Decades-low trade deficit likely to persist in the near-term on the back of high import costs.

After hitting a record deficit of US$6.02 million in August, the most recent trade balance in September showed the trade deficit narrowing to US$4.82 million, the lowest deficit in 6 months. Nevertheless, the trade deficit is still at a rather historically high level. The recent easing in trade deficit was due to a surge in exports (+7.0% YoY) driven mainly by an increase in electronics exports (+19.3% YoY) particularly in semiconductors (+28.2% YoY), reversing a decline of 2.0% YoY in August. Meanwhile, imports rose by 14.1% YoY in September, but marked a deceleration from the 26.2% YoY in August as global oil prices eased. Should export performance continue to outperform while import costs continue to ease, we should see Philippines' trade deficit continue to improve. However, we expect the slowing global demand to limit the upside to export growth, which may mean that the trade deficit may see limited improvement for now.

Given the weak export growth, surging import bills especially in energy, and buoyant import demand for capital goods and infrastructure materials, the current account deficit could widen to around 5% of GDP in 2022 before narrowing slightly to around 4.5% in 2023, compared to just 1.5% in 2021.





Source: *OCBC, Bloomberg*

Singapore: Sharp slowdown ahead

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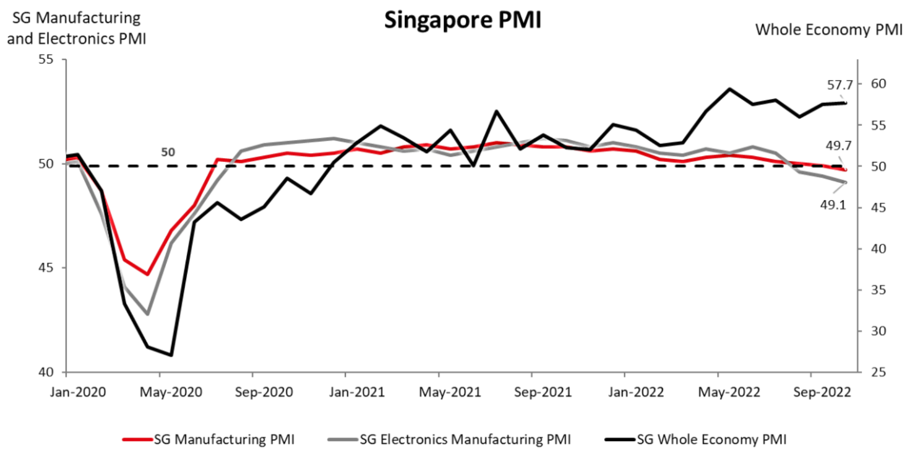
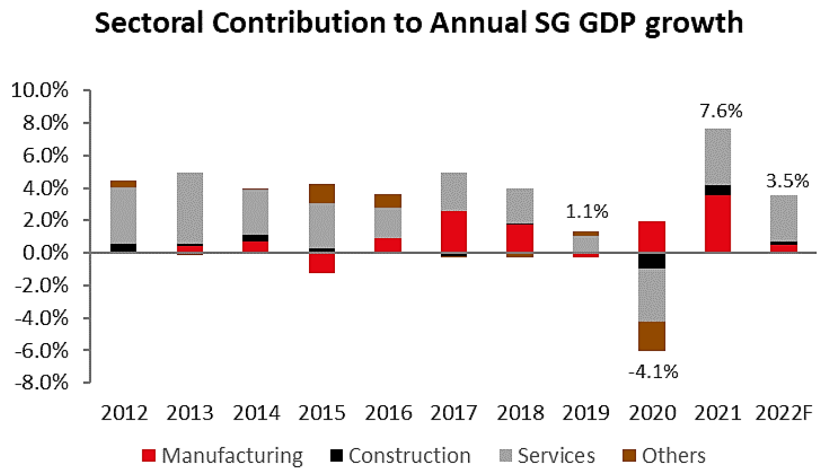
2022 turned out to be better than expected from a growth perspective for the Singapore economy. Although Singapore's 3Q22 GDP growth was revised down from the flash estimates of 4.4% YoY (1.5% QoQ sa) to 4.1% YoY (1.1% QoQ sa), this was mainly due to weaker manufacturing growth which was revised down to 0.8% YoY from the initial estimate of 1.5% YoY. Within manufacturing, output expansion in transport engineering, general manufacturing and precision engineering was offset by declines in electronics, chemicals and biomedical manufacturing, and the sector actually shrank 3.8% QoQ sa. Compared to a quarter ago, manufacturing actually contracted 3.8% QoQ sa due to the weakness in electronics.



Source: *OCBC, CEIC*

Services growth, on the other hand, picked up speed from 5.0% YoY in 2Q22 to 5.8% YoY in 3Q22, and actually recovered from a 0.1% QoQ sa decline in 2Q to expand by 2.1% QoQ sa. Stronger growth was registered in F&B services (30.5%), real estate (11.7%), professional services (8.3%), other services (8.0%) and transportation & storage (6.8%), whereas accommodation fell for the third straight quarter by 1.9% due to demand drop in quarantine and stay-home-notice dedicated facilities a year ago and finance & insurance also slowed to just 0.4% amid a fall in net fees & commission income for banks. Construction growth was unchanged at 7.8% in 3Q22 which is an acceleration from the 4.8% seen in 2Q as both public and private sector construction output rose.

With 4.2% GDP growth in the bag for the first three quarters of this year, around 3.5% growth (which is the mid-point of for the official growth forecast prior to this latest revision) for the full year of 2022 suggests that 4Q22 growth will be about 1.5% YoY which is slightly below our earlier estimate of 2.0%. The picture for 4Q22 looks patchy with manufacturing likely to contact 1.5% YoY but is likely offset by services, especially with the strong recovery in air travel and tourism-related services and consumer-facing sectors like F&B services. So unlike the case of China where the worst may be behind them, this may not necessarily be the case for the Singapore economy as far as the growth trough is concerned. In particular, external demand which expanded 9.1% in 3Q22, was much stronger than total domestic demand at 2.3%.



Source: *OCBC, CEIC*

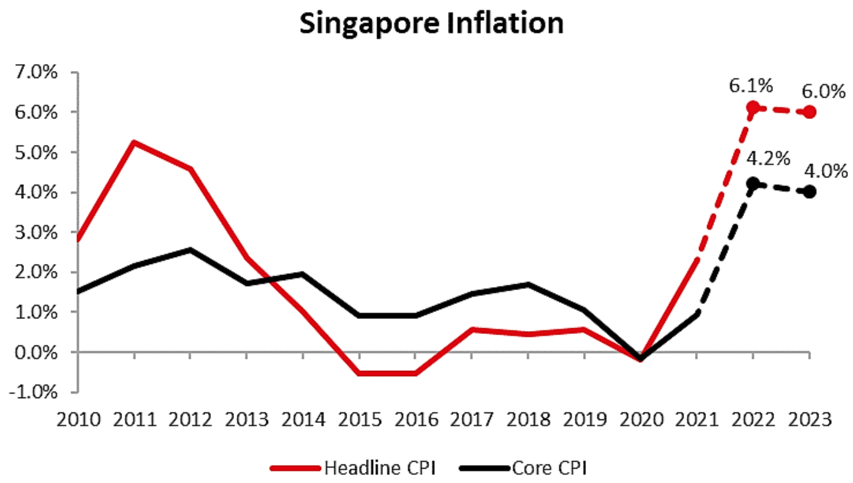
That said, a recession is not the baseline scenario for 2023 as yet but MTI's 0.5-2.5% official growth forecast implies a further slowdown from 2022. This is not unexpected given that external economic and geopolitical headwinds are already brewing, with sharp slowdowns if not outright recession worries in the major economies like the US and Eurozone, coupled with the lingering Russia-Ukraine war and its global supply chain disruptions, aggressive global monetary policy tightening amid elevated inflation, decline in global semiconductor demand (exacerbated by the US-China tensions), cut back in capex by semiconductor manufacturers, and China's ongoing struggle with Covid and weak property market. The weaker external economic environment will increasingly weigh on the outward-oriented sectors in Singapore. The silver linings are the recovery in domestic and tourism demand within the ASEAN economies, continued recovery in air travel and international visitor arrivals to the region and Singapore which benefits aviation- and tourism-related sectors. Hence the entertainment & recreation industry, the professional services sector and the consumer-facing sectors like food & beverage will benefit.

Our house forecast is for 1-3% growth (midpoint 2%) for 2023, but this is on two key assumptions: first, that major central banks will pause on its rate hikes in 1H23 as inflationary pressures start to ease amid the global growth slowdown, and second, China will further relax its zero-Covid policy and shore up its property market through more proactive policy support which could provide some support to the regional economies. If there is a further escalation of these headwinds, then an outright sequential dip in the quarterly growth momentum cannot be ruled out. Notably, manufacturing, especially electronics, will be a laggard going ahead, while wholesale trade may also be impacted by the global cum China demand slowdown story. Financial sector momentum has also waned. Businesses and consumers are also turning more cautious in general. However, this may not be a game-changer to deter the central bank from persisting with their hawkish monetary policy until inflation shows convincing signs of returning to earth.

Given the deterioration in the external growth and demand environment, Singapore's trade growth prospects are similarly impacted. The non-oil domestic export (NODX) growth forecast is factoring in a slump to -2% to 0% in 2023, down from around 6% in 2022, due to the high base and lower oil prices (EIA estimates at US$95 pb for 2023 versus US$1,002 in 2022), according to Enterprise Singapore. The WTO had earlier tipped global merchandise trade to slow to 1% in 2023 down from 3.5% in 2022 due to headwinds including the Russian-Ukraine war, inflation and monetary policy tightening etc. With oil and electronics trade accounting for about 40% and 25% of total merchandise trade growth in the first three quarters of 2022, these two engines of support will give way amid a weaker global economic outlook. Note Singapore's 3Q22 NODX growth had already eased to 7.2% YoY, after 2Q's 8.9% expansion.

While non-electronics exports rose for seven straight quarters by 10.0% YoY aided by pharmaceuticals (28.7%), structures of ships & boats and food preparations (30.1%), electronics exports actually declined 1.8% YoY in 3Q22 to end a 9 consecutive quarter growth streak. The main drags were from disk media products (-24.3%), parts of PCs (-19.7%) and capacitors (-42.2%). With increasingly bearish guidance from US big tech companies for both demand, capex and staff layoffs, the global semiconductor and electronics demand appears to have weak legs in the near term. As such, electronics exports may remain on a soft footing for the coming months. For the oil trade, there are heightened uncertainties revolving around the EU's sanctions on Russian oil and the G7's Russian oil price cap which could trigger supply changes from Russia and OPEC+ in response, thus potentially triggering more volatility. For the top 10 NODX markets, NODX shone for US (26.4%)m EU27 (26.5%) and Indonesia (24.9%), whereas NODX contracted for China and Hong Kong, and barring a further relaxation of Covid controls in these economies, further downside risks cannot be ruled out.

However, the headline and core inflation picture remain elevated and uncertain. While the October prints suggest some easing in price pressures at 6.7% YoY and 5.1% YoY respectively, which is slower than the 7.5% and 5.3% seen in September, these readings are still significantly higher than pre-Covid levels of between 1-2%. Moreover, the smaller increases in prices of electricity & gas, retail and other goods and services and private transport inflation remain to be seen if it will be sustained. Looking ahead to 2023, there are some factors for consideration, namely the anticipated 1% point GST hike to 8%, the Progressive Wage Model salary adjustments across different industries, the public transport fare adjustments, near record-high COE premiums due to firm demand and tight COE quotas, ongoing rental inflation with the return of foreign talent and continued pass-through from the accumulated import, labour and other business costs to consumer prices amid resilient demand. This could still contribute to formidable domestic inflation drivers even if external pricing pressures on the food and energy side should moderate with time.



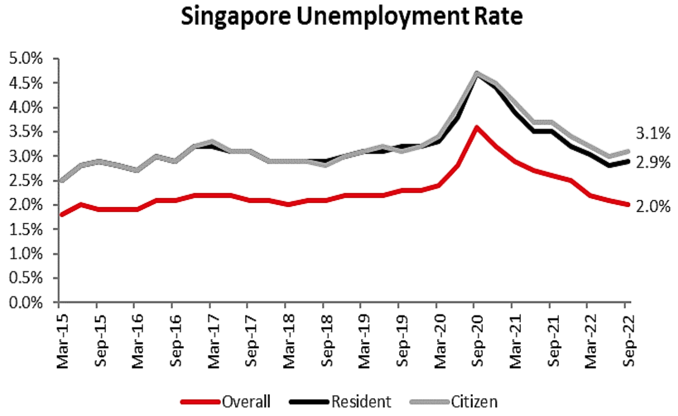
Source: *OCBC, CEIC*

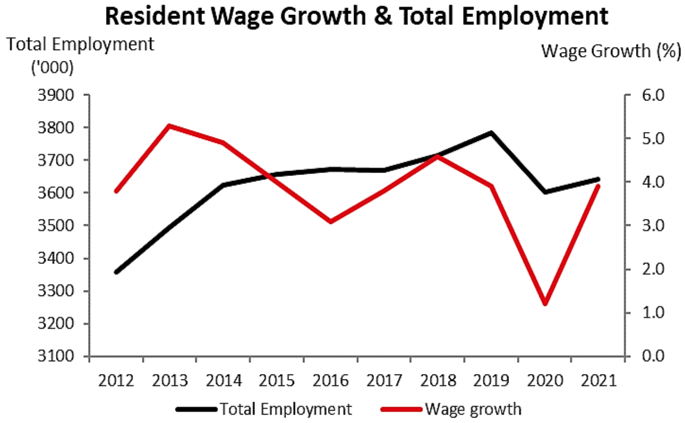
The MAS-MTI statement on inflation is quite telling – it notes that Singapore's imported inflation across a range of goods and services will remain significant for some time, and core inflation is also projected to stay elevated in the next few quarters before slowing more discernibly in 2H23. As such, they reiterated that there are still upside risks to the inflation outlook, including from fresh global commodity price shocks and more persistent-than-expected external inflation. This hardly sounds reassuring that the battle against inflation has been won. Similarly, the official 2023 headline and core inflation forecasts stand at 5.5-6.5% and 3.5-4.5% respectively, which is around the 6% and 4% anticipated for 2022, there may be little relief on the inflation horizon.

A further tightening by MAS at the April 2023 policy review remains possible since headline and core CPI may not peak and subside until 2H23, even though there is a reference to the cumulative effects of monetary policy tightening since October 2021 which suggests some policy confidence that price pressures will not become entrenched and the inflation momentum will slow.

The labour market has been going gangbusters with the re-opening of the Singapore economy. The overall unemployment rate has fallen to 2.0% in 3Q22 while the resident unemployment rate rose slightly to 2.9%, but still remained marginally below their respective pre-pandemic levels. 83,100 jobs were added during the quarter, namely from the construction, others services industries, and manufacturing. However, value-added per actual hour work also fell by 1.7% in 3Q22 and total retrenchments also rose from a record low of 830 in 2Q22 to 1,600 in 3Q22, suggesting some softening in the hiring intentions ahead. The business expectations survey showed that while a net weighted 15% of services firms still plan to increase hiring in 4Q22, led by the accommodation sector (44%), the manufacturing sector only has a net weighted 6% of firms planning to increase hiring, partly dragged down by the medical technology segment in the biomedical cluster.

Singapore

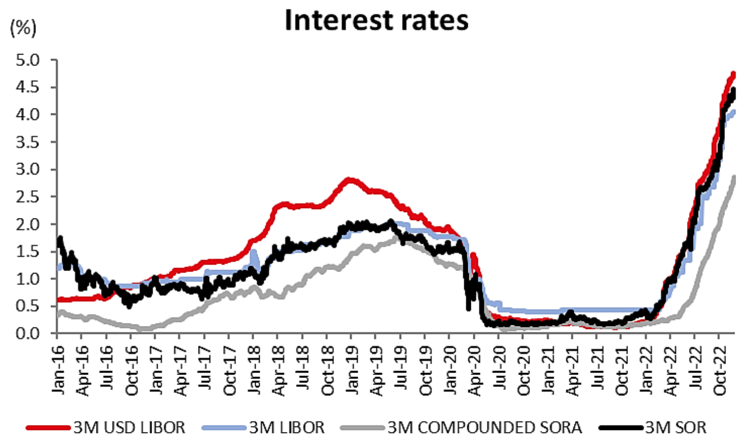




Source: *OCBC, CEIC*

That said, foreign investments continue to flow into Singapore. Fixed asset investment commitments hit S$17.17 billion in 2020 before moderating to S$11.80 billion in 2021 during the pandemic. For the first three quarters of 2022, Singapore has received S$9.47 billion from projects in the manufacturing, especially from the electronics and biomedical clusters, and the services sectors. The continued policy focus on staying open for business, investment-friendly and training and upskilling workers remain key attractive factors. Singapore has climbed back to 3rd most competitive economy in 2022 after slipping to 5th place in 2021, according to the IMD World Competitiveness Ranking. Denmark and Switzerland were in 1st and 2nd place respectively. Singapore had ranked top globally for domestic economy, international trade and technological infrastructure, but lagged in management practices (14th), scientific infrastructure (16th) and health and environment (25th). In addition, IMD said indicators based on executives' sentiments also highlighted concerns with respect to hybrid work models and the overall attractiveness to foreign highly-skilled professionals.

Domestic interest rates have risen in tandem with the higher global interest rate environment as major central banks play catch up to combat elevated inflation. The 3-month SIBOR has jumped from 0.435% in early January 2022 to around 4.06% as of 24 November, while the 3-month SOR also surged from a low of 0.264% to 4.46% over the same period. SORA also traded in a wide range of 0.0355% to a year-to-date high of 4.39% before stabilizing around 3.51% currently. With the Fed set to continue to hike interest rates, albeit at a reduced pace since cumulative tightening has put the Fed Funds rate into restrictive territory, the SGD interest rates are likely to track higher as well but to a smaller magnitude given that MAS has also tightened its S$NEER policy stance five times since October 2021. According to an OCBC Financial Wellness survey, the proportion of homeowners who face some difficulties in repaying mortgage loans has risen from 31% in 2021 to 40% in 2022, while 38% of Singaporeans worry about not being able to afford a home which is up from 36% a year ago. As of 15 November 2022, the three local banks have raised their fixed home loan interest rates to up to 4.5%. In October, the Singapore household debt situation was described as "generally healthy" in Parliament, with fewer than 30 units seeing foreclosure as of 2Q2022.



Source: *OCBC, CEIC*

The local property market has actually been very strong in 2022, defying the global downturn and gravity so far despite various rounds of cooling measures. Prices of private residential properties was up 13.6% YoY (3.8% QoQ) to record levels in 3Q22 whilst the rentals of commercial office and industrial space also increased by 7.2% and 4.9% YoY respectively. With the latest round of cooling measures (which included raising the medium-term stress test interest rates used for computing loan eligibility from 3.5% to 4%, instituting a 15-month wait-out period for private homeowners who want to downgrade to HDB, reducing the HDB loan-to-value limit from 85% to 80% as well as introducing a 3% interest rate floor for loan eligibility computation) to rein in skyrocketing prices, the number of private residential property sales fell 9.7% QoQ in 3Q22 compared to the phenomenal growth of 27.5% QoQ in 2Q22. Meanwhile, the average occupancy rates for private office space rose from 87.1% to 87.4% as more workers returned to work in office arrangements, while that for private retail space also increased further from 90.6% to 91.3% during the same period.

Looking ahead, however, the combination of slowing growth and rising interest rate environment, coupled with the likelihood of further cooling measures if the property market remains too buoyant, should inject a sense of rationality if not caution into property investment climate. However, strong household balance sheets and ample liquidity, a tight labour market with very low unemployment rates and healthy wage growth, coupled with a low private housing supply and inventory will continue to underpin the private residential market in the near-term. The 2023 private residential market outlook should turn less rosy but remains far from a correction. Foreign investor demand is also picking up amid the strong SGD and Singapore's safe haven attraction. Newly introduced schemes like a new work pass for top talent that earn at least S$30,000 per month may also be an additional demand driver even though the numbers are not expected to be huge.

In conclusion, even though the growth prognosis for 2023 has turned south in tandem with the global economic environment, nevertheless Singapore remains well-positioned to capitalise on the rebound when it materialises. Policymakers remain focused on pushing ahead in areas like the green economy, digitalisation, raising productivity, building local enterprise capabilities, embracing innovation, attracting investments, strengthening the economic ecosystem, promoting internationalisation, transforming businesses, and upskilling workers to maintain a competitive edge. While Singapore may not be able to avoid a recession if major economies experience a protracted or sharp slump, Singapore remains a stable, trusted and well-connected location to do business in the medium-term. To assist households and businesses with the near-term impact of rising costs and rapid change, fiscal policy may continue to play a significant role in 2023 with the upcoming Budget.

South Korea: Global slowdown restrains exports

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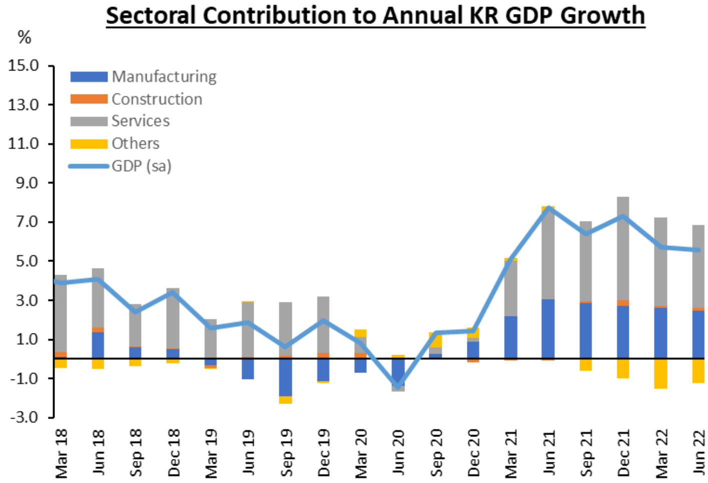
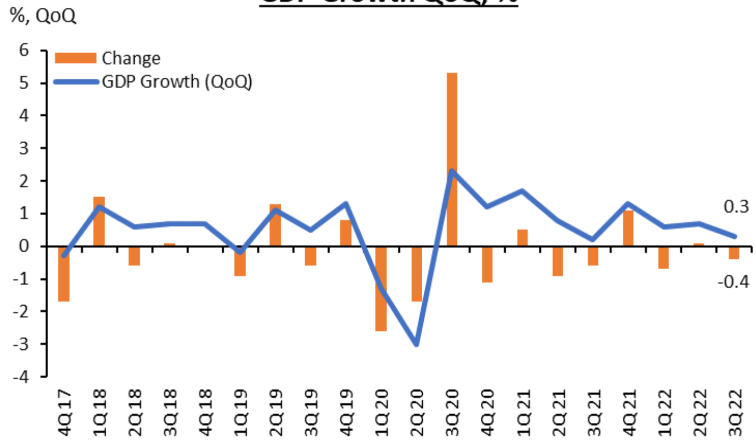
- South Korea has emerged apace from the pandemic through prudent health management and supportive policies.
- However, economic challenges such as slowing export growth momentum due to a softer global growth outlook will restrain Asia's fourth largest economy.
- BOK will continue to monitor inflation while simultaneously assessing how growth, inflation, and financial and FX markets are affected by these changing external factors.

Asia's fourth largest economy continues to moderate amid export growth momentum from the slowing global growth outlook. We revise downwards South Korea's Gross Domestic Product (GDP) growth in 2022 to 2.6% YoY from our previous forecast at 2.8% YoY on the back of deteriorating growth prospects and high energy prices. A slowdown in global growth and trade will mean that 2023 GDP growth forecast will also be revised downwards to 1.8% YoY from 2.5% YoY. The exports driven economy will experience a slump in economic activity early in 2023.

Sectoral Contribution to Annual KR GDP Growth



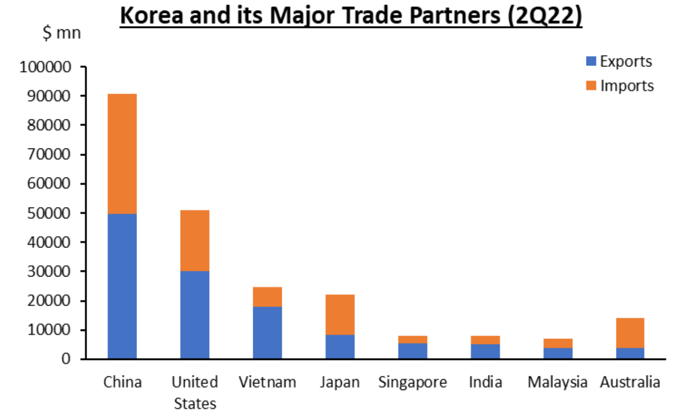
GDP Growth QoQ, %

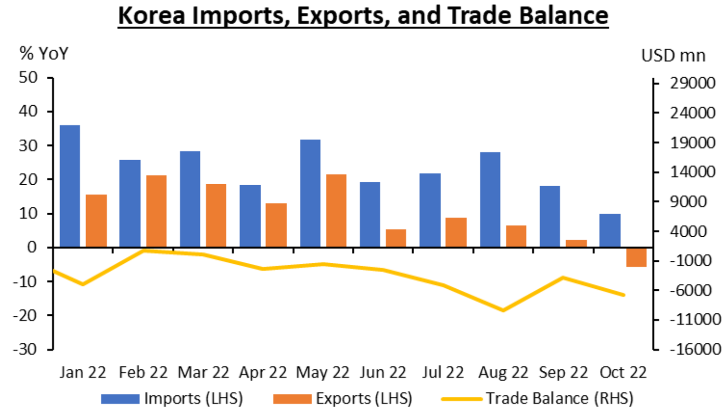


Source: *CEIC, OCBC*

Sluggish Growth

South Korea's GDP growth decelerated in 3Q22 to 0.3% QoQ compared to 0.7% in the previous quarter. The latest data showed that growth was supported by higher domestic consumption and investment but was weighed down by imports outpacing exports amid the weaker Won. Furthermore, South Korea's economy faces growing headwinds from subsiding external demand for the country's products. Global semiconductor makers are struggling with softer demand for chips amid inflation and recession fears and this is no exception for the Korean chip manufacturers. One market focus will be on the calibration in China's Covid-zero policy and potential re-opening hopes. This will allow for a rebound in the demand for South Korean exports as Chinese demands makes up a significant portion at 32.1% of total exports in 2Q22.

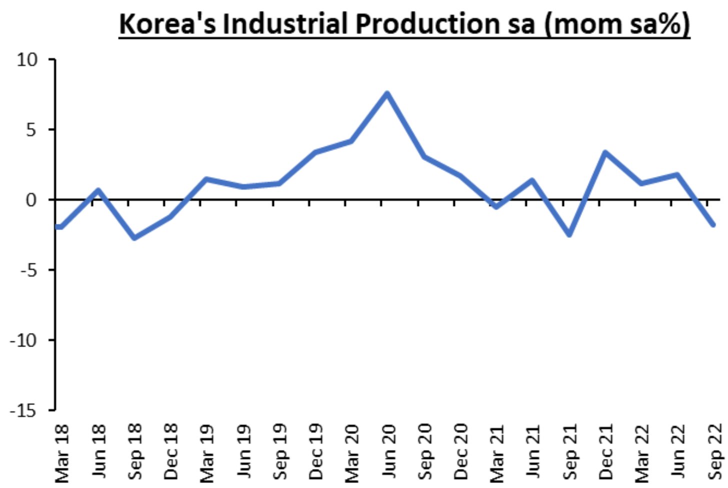


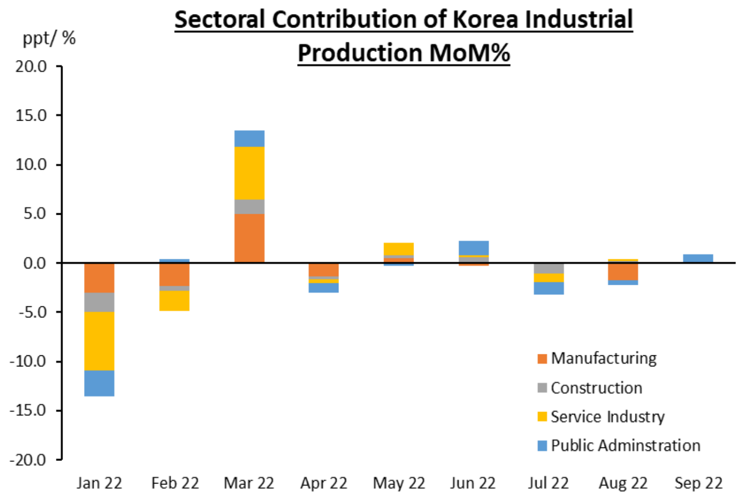


Source: *Bloomberg, OCBC*

Trade deficit remains a concern for South Korea

South Korea overturned years of general trade surplus to enter a trade deficit in 2022 as a result of high import costs driven by surging food, weakening Won and soaring energy prices. The trade deficit came in at US$6.7 billion in October 2022, worsening from US$3.8 billion in the previous month. Import growth slowed down to 9.9% YoY in October from 18.2% YoY the month prior. Exports growth actually shrank 5.7% YoY in October with factors such as supply-chain disruptions and softer demand for semiconductors weighing down exports.



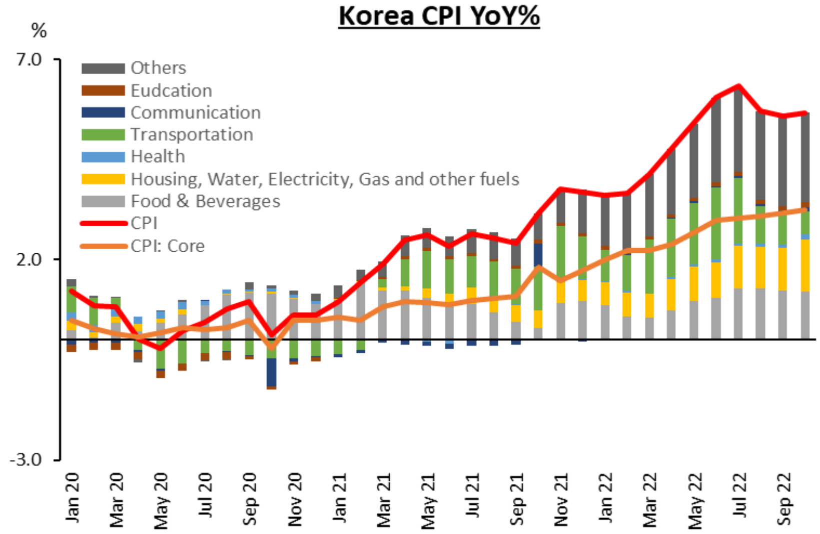


Source: *CEIC, OCBC*

Weakening Industrial Production

South Korea has not been immune to the faltering global demand as it has already started to see signs of slowing in production in the recent months. Korea's overall industrial production for September slowed to 0.8% YoY, compared to 1.5% YoY the month prior. On top of this, industrial production also contracted -1.8% MoM in September compared to -1.4% MoM in August, recording its third consecutive decline since July this year. Being a global industrial giant, Korea has always pride itself in its manufacturing sector. However, Korea's manufacturing sector continues to face challenging business conditions in October. Korea's manufacturing PMI rose to 48.2 in October from 47.3 in September, indicative of further deterioration in the health of the manufacturing sector. In the near-term, we expect manufacturing production to remain subdued amid global economic slowdown and current inflationary pressures.

Korea CPI YoY%

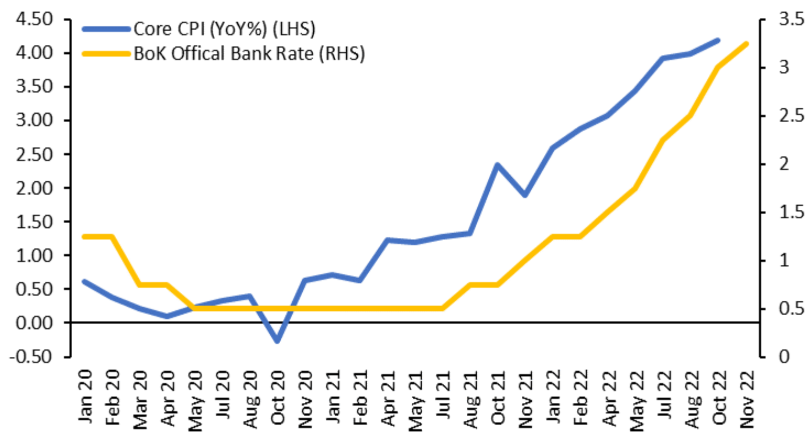


Source: *CEIC, OCBC*

Core inflation continues to exceed BOK's 2% inflation target

Consumer price inflation rose 5.7% YoY in October 2022, versus 5.6% in September, led by lagging effects from earlier increases in global raw material prices. The inflation print had previously slowed in September to 5.6% from 5.7% in August and the high of 6.3% in July 2022. On the other hand, core inflation, which excludes food and energy, has seen an increase to 4.8% in October on an annual basis from 4.5% in September 2022. Food and energy increased 10.47% YoY on the backdrop of a weak Won, disruptions to energy and food supply chain from the ongoing Russia-Ukraine conflict, and OPEC+ decision to cut oil production. At this juncture, there is still a need to be watchful for signs which might add to Korea's inflationary pressures, namely due to the weak Won, and still elevated global commodity and energy prices.

Core CPI (YoY%) vs. BoK Official Bank Rate



Source: *Bloomberg, OCBC*

Bank of Korea's monetary policy outlook

The Bank of Korea (BOK) raised interest rates by 25bps in its November 2022 MPC meeting to bring its seven-day repurchase rate to 3.25%. The MPC statement together with comments from the press conference suggest that the BOK is moving near the end of its hiking cycle. In November's MPC statement, the central bank sees "continued rate hikes as warranted for some time" while Governor Rhee clarified in the press conference that "some time" means "three months"; Rhee also revealed 3 members see terminal rate at 3.50%, 1 member sees it at 3.25%, 2 sees it at 3.75% - hence the "median dot" in BOK version is 3.50% - meaning one more 25bp hike after November's action. This is in line with our base case for **one more 25bps in 1Q2023**. Prior, the BOK had dialled back to a 50bps hike at its October 2022 meeting, with two dissenters (out of the seven board members) voting for a 25bps hike. While inflation has moderated from its peak of 6.3% YoY in July, BOK noted that CPI remained high in the mid- to upper- 5% range and is likely to stay elevated at around the 5-6% range for some time as the weak Korean won continues to fuel inflationary pressures. BOK expects 2022 growth to be generally consistent with its August forecast of 2.6%, but tipped its 2023 forecast to 1.7%, lower than its August projection of 2.1%. The BOK has continued to hint at further policy tightening and inflationary risk in its forward guidance. We believe that as signs of an economic slowdown become more apparent, the BOK will slow the pace of additional rate hikes.

Korean Won Outlook

The Korean Won (KRW) has always been regarded as a "high-beta" currency and was one of the region's worst-performing currencies, though slightly better than the Japanese Yen (JPY). Factors such as the Federal Reserve decision, China covid situation and reopening hopes, and credit-market conditions in Korea will continue to be in focus. That being said, we lean towards a bullish bias, with positive factors such as Korea's potential inclusion into the FTSE World Government Bond Index (WGBI) and improvement in the country's current account balance. Korea's inclusion into the FTSE WGBI should continue to see a stable increase in demand for Korea Treasury Bonds (KTB) which would result in the reinforcement of the KTB and FX market stability.

Mixed 2023 outlook

Near term, policy makers will continue to monitor inflation while simultaneously assessing how growth, inflation, and financial and FX markets are affected by these changing external factors. BOK has made it clear that it will prioritise price stability to the utmost as long as inflation remains high in the 5-6% range.

The BOK has raised its policy rate to 3.25% during the November 2022 MPC, the highest since 2011, as it looks for price stability in the current high inflation environment. As global inflationary pressures are projected to stay elevated for a considerable time throughout 2023, we expect the BOK to hike another 25bps in the first quarter next year to a terminal rate of 3.50%. We continue to look for the forward guidance from the central bank for its future policy directions.

Taiwan: It's not only about inflation

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- Taiwan has set itself on the recovery path of late, mainly driven by the sharp recovery in domestic consumption. While the government gradually lifted its Covid 19 restrictions and reopened the economy, the weakening global goods demand as well as the rising US-China geopolitical tensions have pressured the export outlook.
- Given the headline inflation has likely already peaked at a 14-year high of 3.59% YoY in June 2022, any further gains for the headline inflation may be capped given the softening growth outlook. However, strong demand side pressure may emerge when Taiwan fully reopens its borders as the food and energy price outlook remains uncertain. Overall, the inflation trajectory should stay in the 2.5% - 3.0% YoY range until the first quarter of 2023, averaging around 3.0% in 2022 before easing to 2.0% in 2023.
- In terms of monetary policy, the Central Bank of the Republic of China (Taiwan) (CBC) raised its policy rate by another 12.5bps to 1.625% in its September meeting, and we expect CBC to maintain a cautious approach to its rate hike pace in the coming months unless inflation turns surprisingly higher.

A mixed outlook persists despite stronger-than-expected 3Q22 growth
Taiwan's 3Q22 GDP growth came in at 4.10% YoY, rebounding from the previous quarter of 3.05% YoY in 2Q22. The key growth driver was a sharp recovery in private consumption which surged 7.49% YoY compared to 2.89% YoY in the previous quarter. This improvement follows the government's gradual lifting of its Covid 19 restrictions and reopening of the economy. However, government expenditure and investment spending growth both decelerated significantly to 2.35% YoY and 0.91% YoY respectively, from 5.85% and 9.42% YoY in 2Q, which weighed on the headline GDP growth alongside weak growth expectations for China and lingering geopolitical tensions. Furthermore, while Taiwan has traditionally been in the role of global tech leadership, much of the latest data especially the manufacturing surveys indicate a continued pattern of weakening global goods demand. Taiwan's export growth has also moderated to 1.36% YoY compared to 4.32% in 2Q.

In terms of the contribution to the headline GDP growth, the bulk of the contributions came from private consumption (+3.24 pp) followed by government consumption (+0.32 pp), gross capital formation (+0.28 pp), and net export (+0.26 pp).

That's said, although domestic demands are holding up the growth momentum for now, there are still reasons to expect some slowdown going forward amid prolonged and elevated external headwinds, such as tightening global financial conditions, supply chain disruptions and lingering geopolitical risks.

Chart 1: Domestic Demand is the Key Growth Driver
(Percentage contribution, by expenditure)

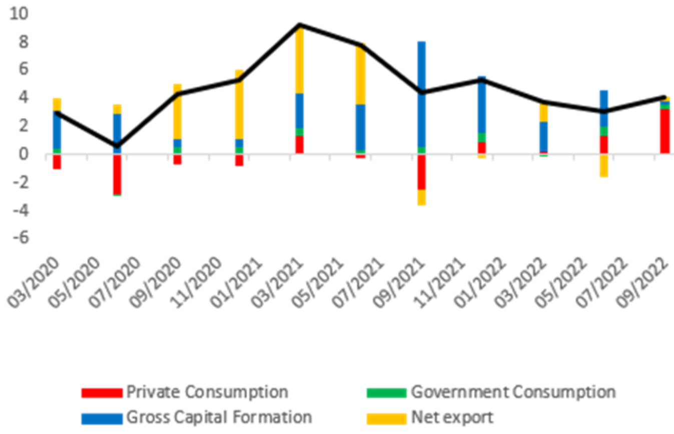


Table 1: Real GDP by Aggregate Demand, 2020-2023F (%)

Component	2021	1H21	2H21	1Q22	2Q22	3Q22	2022F DGBAS	2023F CBC	2022F DGBAS	2023F CBC
Domestic Demand	5.47	4.34	6.5	2.65	5.46	4.48	3.45		4.08	
Private Expenditure	-0.31	1.1	-1.72	0.58	2.89	7.49	3.09		4.96	
Public Expenditure	3.78	3.42	4.1	-0.43	5.85	2.35	2.27		4.25	
Gross Capital Formuation	17.96	11.15	25.05	8.23	9.42	0.91	4.85		2.63	
External Sector										
Exports	17.14	22.13	13	9.06	4.32	1.36	2.91		5.09	
Imports	18.12	17.57	18.72	8.66	8.83	1.2	6.03		7.01	
Real GDP	6.57	8.48	4.85	3.72	3.05	4.1	3.06	3.51	2.75	2.9

Source: *Bloomberg, DGBAS, CBC, OCBCWH*

Non-energy prices remain on the rise

Taiwan's core inflation accelerated rapidly to 2.96% YoY in October, from 2.74% in August and 2.79% in September, while headline inflation decelerated to 2.72% YoY from 2.76% previously as oil prices eased. Apart from energy prices, inflation was broad-based with core goods price inflation remaining high at 3.32% YoY and service price inflation at 2.68% YoY. Similarly, the heavy-weight food prices remained elevated at 5.17% YoY. Entertainment costs gained momentum at 3.15% YoY with increased tourist consumption and demand as Taiwan lifted its border controls in the middle of October, which added to domestic inflation pressures.

Import inflation rate also remained high in October at 14.74% YoY in responses to the weakening TWD (YTD -10.70% against greenback as of 28 November), despite coming in slower than the 16.41% reading in September. Price gains were driven by raw materials (+36.66% YoY) with continuing pandemic and supply constraints in major advanced economies, while food-related costs (+23.47% YoY) also extended gains on the back of the Ukraine war and the persistent currency weakness.

While the headline inflation has likely already peaked at its 14-year high of 3.59% YoY in June, any further gains for headline inflation may be capped given the softening growth outlook. However, strong demand side pressures may emerge when Taiwan fully reopens its borders with food and energy price outlook remains uncertain. Hence, the inflation trajectory should stay in the 2.5% - 3.0% YoY range until the first quarter of 2023 to average around 3.0% and 2.0% in 2022 and 2023 respectively.

Chart 2: Headline CPI Moderated but Core CPI Stayed Elevated

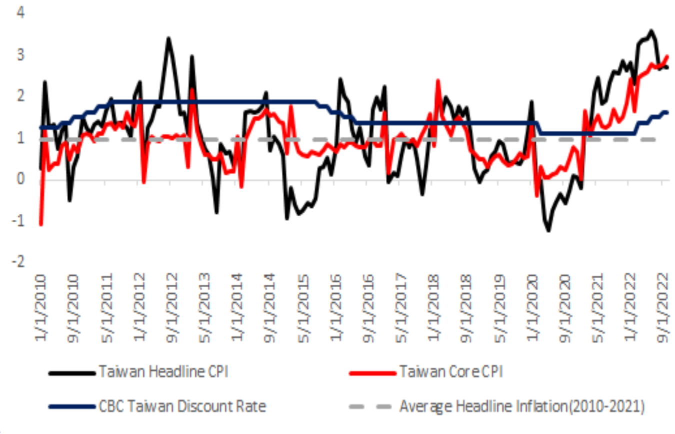


Chart 3: Wholesale Price Decelerated Further to 11.09% YoY in Oct

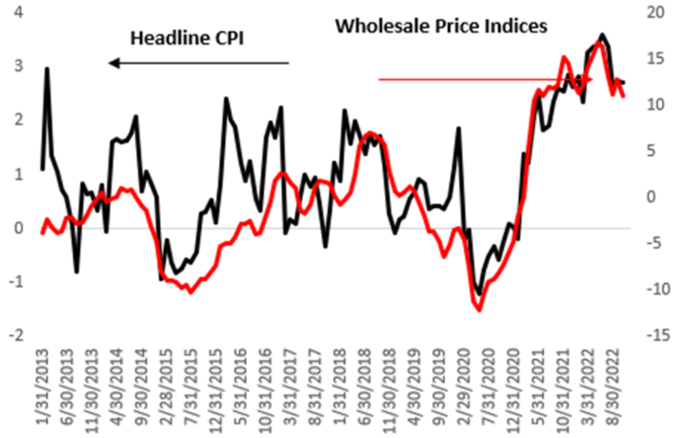


Chart 4: Key Components to Headline Inflation (YoY%)

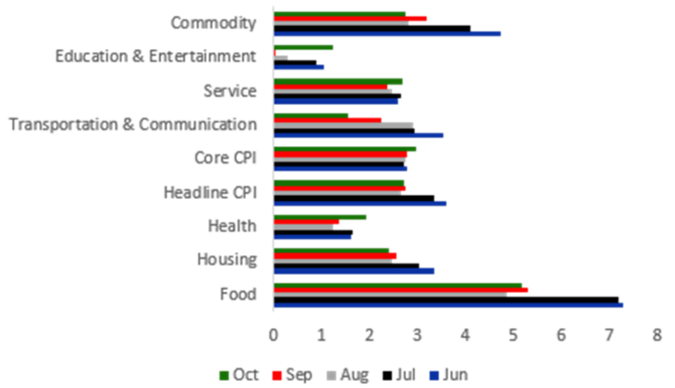
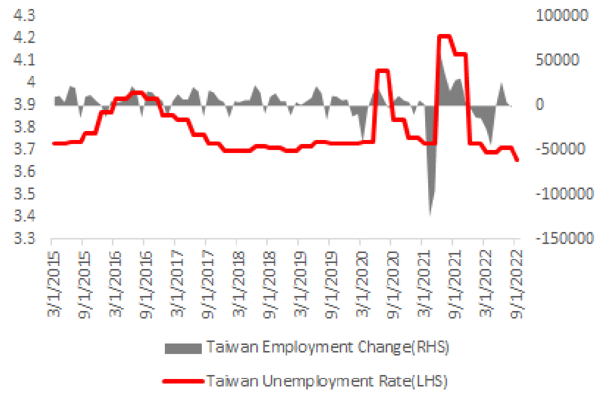


Chart 5: Steadied Labour Market



Source: *National Statistics Bureau, Bloomberg, WIND, OCBCWH*

Expecting another 12.5bps hike in December

While an aggressive Fed has pressured EM central banks to tighten their monetary policy, the softening growth outlook and moderation in inflation should keep the Central Bank of the Republic of China (Taiwan) (CBC) to maintain a cautious rate hike pace. In its September policy meeting, the CBC raised its policy rate by another 12.5bps to 1.625%, following +12.5bps in June and +25bps in March 2022. Meanwhile, the bank also raised the reserve requirement ratios (RRR) for the second consecutive time in response to keep the GDP and M2 growth at an appropriate pace. Against this backdrop, CBC governor Yang stated this would help to contain domestic inflation expectations while reducing the financial impact of policy tightening on households as well as small and mid-sized enterprises.

Even though two out of 15 board members had dissenting votes for a larger hike of 25bps, the MPC statement turned marginally dovish on the growth assessment by highlighting downside risks to its GDP growth forecast. On this note, the CBC slightly raised its headline CPI and core inflation forecast to 2.95% and 2.52% respectively compared to 2.83% and 2.42% previously, while cutting its growth forecast for 2022 from 3.75% to 3.51%. CBC also expects both inflation and growth to slow in 2023 to 1.88% (headline CPI), 1.87% (core CPI) and 2.90% (growth).

The next CBC policy decision on 15 December will be the last one for 2022 with the next scheduled meeting in March 2023. As CBC Deputy Governor Yang Chin Long flagged that the terminal rate would depend on the near-term inflation and growth trajectory, the prospect of any outsized moves should be capped unless inflation surprises higher. We expect the CBC to maintain the modest pace hikes of 12.5bps in December 2022 and March 2023.

Chart 6: US Fed Fund Rate and Central Bank Policy Rate

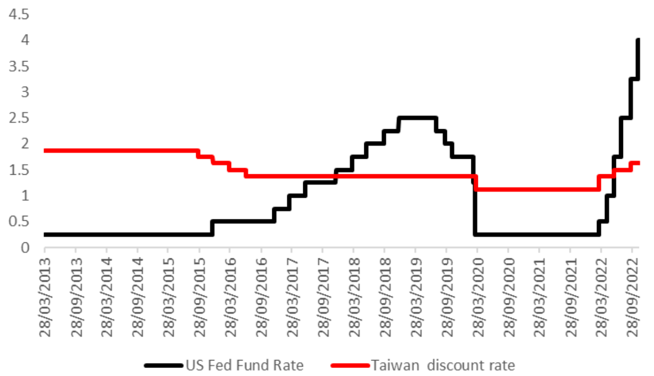
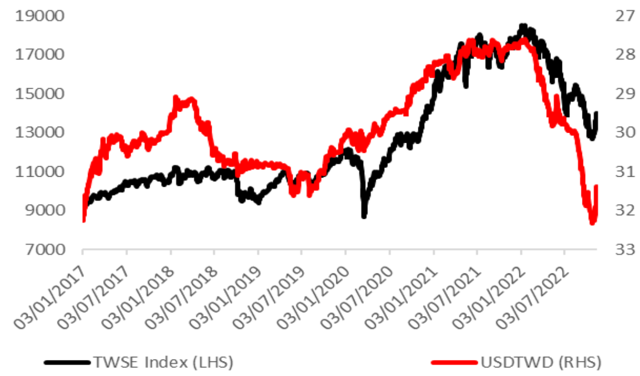


Chart 7: TWSE Index vs USDTWD



Source: *Bloomberg, OCBCWH*

Challenges to Taiwan's Export Outlook

The weakening global demand, China's COVID-zero policy, and elevated US-China tensions have added risks to the manufacturing sector, particularly in semiconductors. In fact, Taiwan's export order has been recording a significant decline in recent months amid cost pressures combined with slowing tech demand. This is in turn weighing on manufacturers' business sentiments. Semiconductors alone contribute 40% of Taiwan's exports of which the China and Hong Kong markets are estimated to account for 40% of this segment.

Against this backdrop, export orders fell by 3.13% YoY in September for the fourth time this year. The drags came from optical equipment (-41.13% YoY), raw materials manufacturing (-31.62% YoY) and electronic-related products (-15.11% YoY). Meanwhile, manufacturing PMI, exports and industrial production have also been impacted.

Even though the moderation had been faster than expected, it may still be too early to expect a quick turnaround. The inventory correction phase in the semiconductor space should raise concerns about a sustained slowdown in exports and the Taiwanese economy. If there is any potential fallout from the US-China relationship ahead, there could be significant consequences for the Taiwanese economy.

Chart 8: Exports in Level Terms remains Low

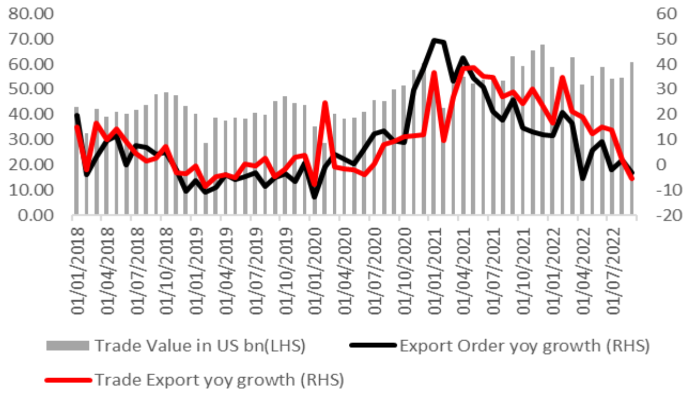


Chart 9: Cautious Business Sentiment and Employment Outlook

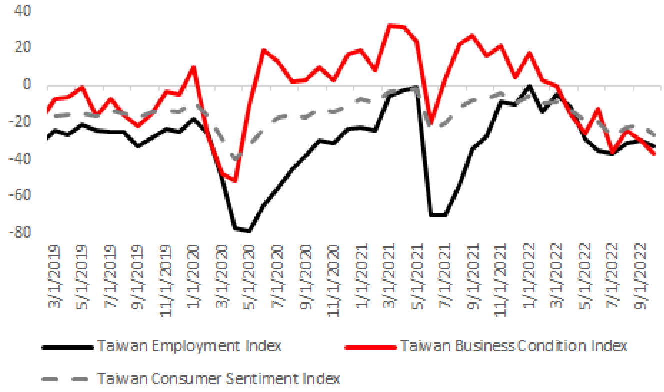


Chart 10: Taiwan Manufacturing PMI In Contraction for Three Months

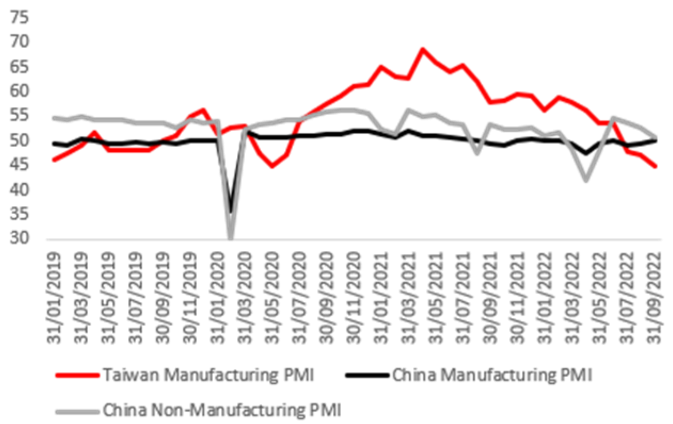
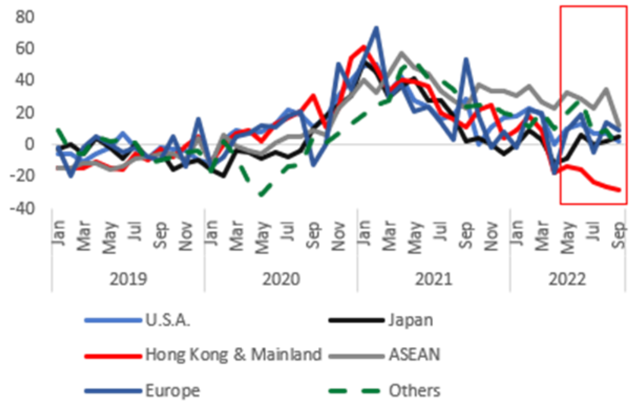


Chart 11: Taiwan’s Export Order by Key Markets



Source: *National Statistics Bureau, Bloomberg, DGBAS, OCBCWH*

A closer look at Taiwan’s foundries

While Taiwan has traditionally benefited from its cost efficiencies and mega-fabs in lower-cost areas, the geopolitical positioning has made it a challenging task for chipmakers in Taiwan to maintain their competitive cost advantage. In particular, the US government signed the CHIPS and Science Act into law on 9 August 2022, with the critical objectives of reviving the dominance of domestic chip-making and fixing the supply chain issues caused by a prominent decline of progress in science and technology. A vast sum of money (nearly $280 billion) has been planned and funded by the US government to train and build facilities to manufacture locally, and through this process, is causing concerns for Asian countries like Taiwan which possess a substantial chunk of the business.

In addition to the US Chips Act, the US-China trade war and growing tensions with Taiwan have also influenced the semiconductor industry. On 7 October 2022, the Biden administration announced a sweeping control on semiconductor sale to China to prevent the export of certain chips and, more importantly, the sales of equipment using certain technologies to Chinese chipmakers. These new restrictions will prevent the export of American-made equipment that Chinese companies need for high-end chip production, while effectively pushing back their innovation and development by several generations. At this point, the industry may see much greater volatility in their earnings in the near term, as Asian firms must balance their risk from US restrictions and China demand. In any case, advanced chips solution providers may face less competition over the long-term horizon.

Table 2: US is Catching up in the Race for Funding

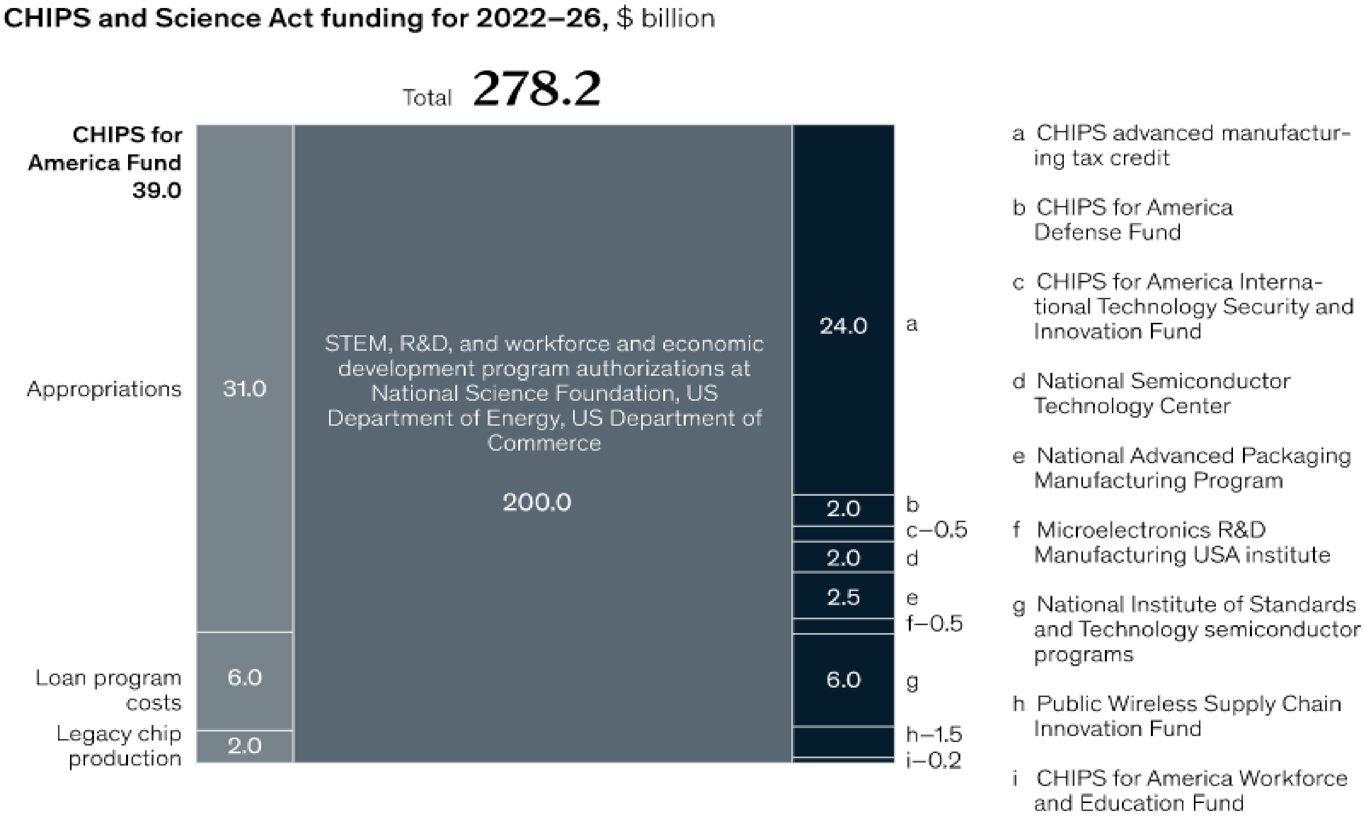
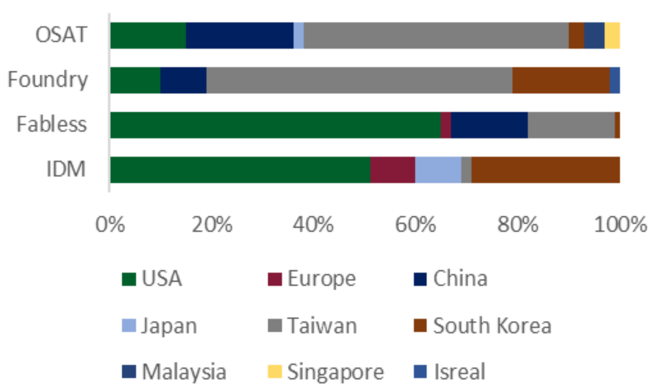


Chart 12: Chip and Science Act cover Funding for US semis R&D

Key Programs	Five-Year Authorization	Increase over Baseline
National Science Foundation (NSF)	**$81 billion**	**$36 billion**
• NSF Tech Directorate	$20 billion	$20 billion
• NSF Core Activities	$61 billion	$16 billion
Department of Commerce (DOC)	**$11 billion**	**$11 billion**
• Regional Technology Hubs	$10 billion	$10 billion
• RECOMPETE Pilot	$1 billion	$1 billion
National Institute of Standards and Technology (NIST)	**$10 billion**	**$5 billion**
• NIST Research	$6.9 billion	$2.8 billion
• Manufacturing USA	$829 million	$744 million
• Manufacturing Extension Partnership	$2.3 billion	$1.5 billion
Department of Energy (DOE)*	**$67.9 billion**	**$30.5 billion**
• DOE Office of Science	$50.3 billion	$12.9 billion
• Additional DOE Science and Innovation	$17.6 billion	$17.6 billion
Total	**$169.9 billion**	**$82.5 billion**

*Across all the DOE sections, there is:
- A total of $14.7 billion for infrastructure, equipment, and instrumentation across 17 DOE National Laboratories.
- A total of$16.5 billion in new or above baseline authorizations for research in the 10 technology areas identified in USICA across the Office of Science and DOE's applied R&D offices in advanced energy and industrial efficiency technologies, artificial intelligence and machine learning, advanced manufacturing, cybersecurity, biotechnology, high performance computing, advanced materials, and quantum information science.

Chart 13: Taiwan at 52% of OSAT/ 60% of Foundry Capacity



Source: *McKinsey & Company, CHIPS and Science Act of 2022, Yole, IC insights, OCBCWH*

Aside from the general outlook, the impact on the Asian foundries such as Taiwan Semiconductor Manufacturing Company Limited (TSMC) could be relatively negative in term of their sustainability and profitability as these firms may now face some reversal on their cost advantage given their traditional large-scale lower cost footprint in Asia. Even though TSMC may see subsidized benefits and opportunities on its fab in Phoenix, Arizona (likely to be functional in 2024), the site can still be considered as small versus its competitors while costs associated with relocation and new hiring could be a big concern for their management.

Nonetheless, TSMC could still hold the advantage in its leadership role in the high-end chip sector given the well-diversified supply chain and their track record as a pure foundry business model. On this note, China customers only accounted for 10% of TSMC's sales in 2021, while still technologically makes the most advanced world's chips, accounting for 65% of global market share.

On the flip side, second-tier foundries including United Microelectronics Corporation (UMC) and Powerchip Semiconductor Manufacturing Corporation (PSMC) may see more risks over time as they have no plans to expand their offshore manufacturing capacity. Meanwhile, their competitors in the US may benefit from the CHIPS Act subsidies which allow them to improve the capital structure over the longer period.

Chart 14: Taiwan's Semiconductor Industry Sales revenue, 2019-2021

Country	Company	Sales revenue (millions of US dollars)		
		2019	*2020*	*2021*
Taiwan	Taiwan Semiconductor Manufacturing Co. (TSMC)*	34,670	45,570	50,073
	MediaTek**	7,970	10,990	17,617
	United Microelectronics Corporation (UMC)*	4,497	5,356	6,451
	Powerchip Semiconductor Manufacturing Corporation (PSMC)	1,120	1,436	2,068
	Vanguard International Semiconductor Corporation (VIS)	873	1,022	1,356
	Total	**49,129**	**64,374**	**77,565**

Chart 15: TSMC's Revenue by Technology in 3Q22

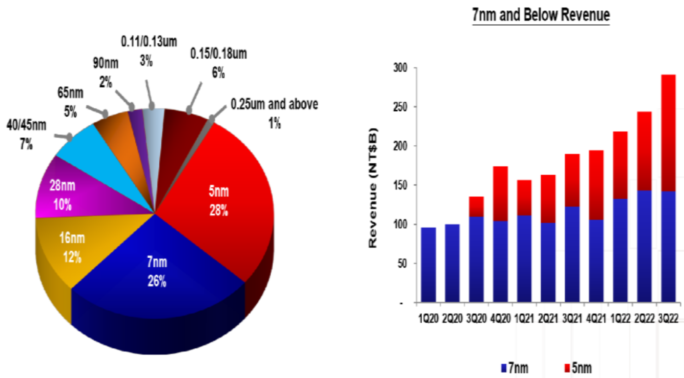


Chart 15: TSMC Deployed 291 Distinct Process Technologies

Technologies	2019	2020	2021
Fab 2 Hsinchu TW	27	27	28
Fab 3 Hsinchu TW	71	68	69
Fab 5 Hsinchu TW	25	25	24
Fab 6 Tainan TW	62	64	61
Fab 8 Hsinchu TW	46	46	43
Fab 10 Shanghai CH	46	47	44
Fab 11 Wafertech US	22	23	22
Fab 12 Hsinchu TW	68	67	73
Fab 14 Tainan TW	75	75	77
Fab 15 Taichung TW	20	24	29
Fab 16 Nanjing CH	5	5	5
Fab 18 Tainan TW		2	5
Total	467	471	475
Distinct Technologies	272	281	291

Chart 16: Breakdown of Global Wafer Fabrication Capacity/Logic in 2019

Logic	<10nm	10-22nm	28-45nm	>45nm
USA	-	43%	6%	9%
Europe	-	12%	4%	6%
China	-	3%	19%	23%
Japan	-	5%	5%	10%
Taiwan	92%	28%	47%	31%
South Korea	8%	-	6%	13%
Others	-	9%	13%	7%

Source: *TSMC, SEMI, Statistia, Gartner, PIIE, OCBCWH*

Revising our 2022 and 2023 GDP growth forecasts

Looking ahead, the road remains challenging for Taiwan despite higher-than-expected GDP growth in 3Q 2022. Assuming 4Q GDP growth may moderate to around 3.50% YoY in 4Q 2022, we expect the economic growth would be around 3.20% and 2.80% in 2022 and 2023 respectively.

Thailand: Global headwinds set to limit growth but China reopening a silver lining for tourism boost.

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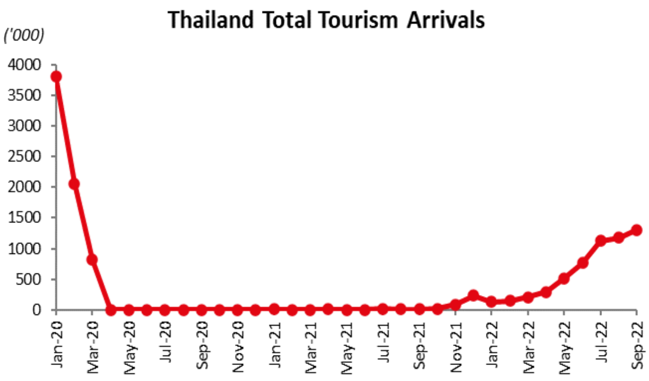
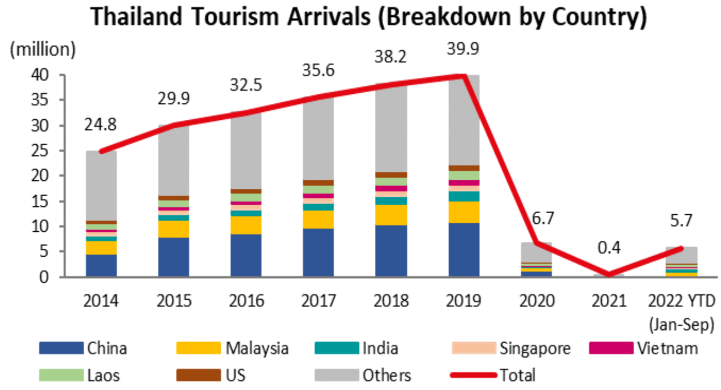
Assisted by Tan Yu Jin

- While tourism arrivals have recovered markedly from Covid levels, it is still a far cry from pre-pandemic levels, largely due to a lack of Chinese tourists inflow.
- While GDP growth is likely to take a hit from a possible moderation in export demand moving into 2023, a strong revival in tourism boosted by a greater inflow of Chinese tourists into the country following the expected easing of China Covid restrictions, could limit the downside to GDP growth.
- Though headline inflation has eased from its peak in August 2022, we expect inflation in 2023 to remain above the Bank of Thailand's (BOT) target inflation range of 1-3%, which will likely prompt further increases in its benchmark rate.

Tourism recovery to pre-pandemic levels hampered by a lack of Chinese tourists, but set to accelerate on China re-opening.

Tourism flows have picked up markedly since the Southeast Asia's second largest economy reopened early this year. Travellers from the top five sources of countries came from Malaysia, India, Singapore, Vietnam and Laos. However, tourist arrivals are currently still far from pre-Covid levels. From January-September 2022, tourist arrivals only totalled about 5.7 million, which is only 19.3% of that in the same period in 2019. In particular, Chinese tourist arrivals, which makes up Thailand's biggest pool of arrivals, have been disappointing due to China's zero-Covid policy. Arrivals from China in the past nine months of 2022 only totalled about 147,000 (making up 2.6% of the total tourist arrivals YTD), which is a far cry from the roughly 11 million arrivals (which made up 27.6% of total tourist arrivals) during the same period in 2019. The Tourism Authority of Thailand (TAT) expects to hit its target of 10 million visitors for 2022.





Source: *OCBC, CEIC*

We expect tourism arrivals to accelerate further in 2023 as China gradually eases its Covid restriction measures as per its recent announcement of a planned pivot in Covid measures. The return of Chinese tourists, especially fuelled by the likely surge in "revenge travel" after 3 years of lockdown, will likely boost Thailand's tourism industry and hence provide support to GDP growth in 2023.

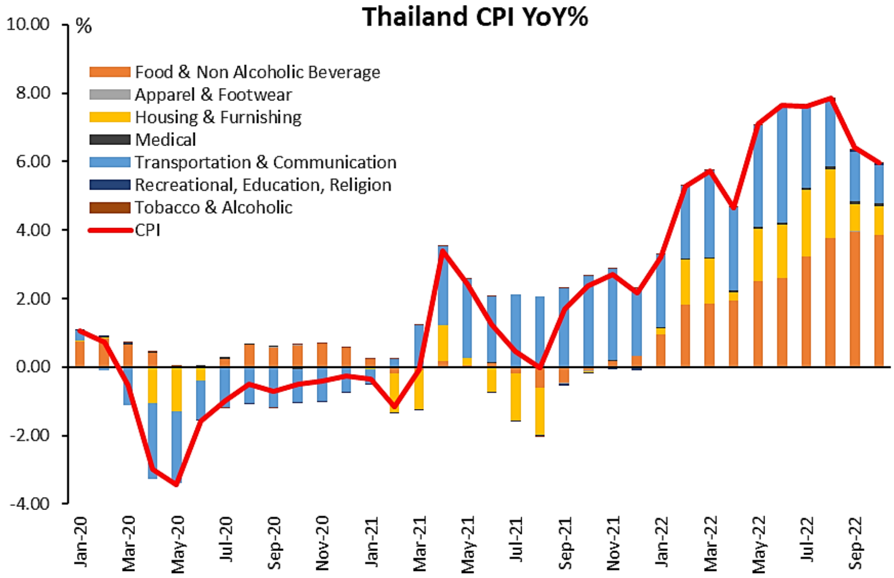
Overall, the TAT expects to receive a total of 18 million international tourists in 2023 and for tourism revenue in 2023 to return to 80% of its 2019 pre-pandemic level.

Exports growth likely to slow amid global growth slowdown.
Exports grew by 10.6% YoY for the first nine months of 2022 as compared to the same period in 2021. As an export-oriented economy, the robust export performance since the start of this year has helped to drive the positive economic growth momentum in 2022. However, knock-on effects from external headwinds such as the global financial tightening conditions and recessionary risks from Thailand's major export markets such as the US and China, may cause demand for Thailand exports to taper in 2023.

Continued upside to GDP growth likely to depend on tourism revival.
It seems that Thailand has been on track to a healthy path of recovery since its reopening. For the first 3 quarters of 2022, Thailand's GDP grew by 3.1% YoY as consumption expenditure and export demand rebounded strongly at a growth of 5.7% YoY and 10.0% YoY respectively. The latest print in 3Q saw GDP clocking a gain of 4.5% YoY, marking a continuous uptrend on a year-on-year basis since 4Q21.

Given the strong recovery in 2022, we revise our 2022 GDP forecast upward from 2.9% to 3.2%. However, given that exports growth is likely to slow amid global demand headwinds, we downgrade our 2023 GDP growth forecast from 4.1% to 3.8%. Key to watch, however, would be the extent of tourism revival boost from China's potential reopening, which may help to offset the downside to GDP growth.

Inflation has peaked due to the provision of government support measures.
Driven by elevated food and energy prices, inflation has trended upwards to hit a 14-year high of 7.86% YoY in August 2022. However, inflation has since peaked and decelerated to 5.98% YoY in its latest October print, aided by government support measures provided for food and energy prices. Moving forward, the government has also decided to extend a diesel tax cut for another 2 months to 20 January 2023 and an electricity subsidy until December 2022 in order to help households cope with the high cost of energy. Thailand's Ministry of Commerce expects inflation to moderate further for the rest of the year due to lower prices of some consumer goods and government support measures. The downside risk is for high energy prices, Thai baht depreciation and growing domestic demand to limit the decline in inflation. Overall, we expect inflation to hit 6.2% in 2022 before easing to 2.7% (within the BoT's target range of 1-3%) in 2023.



Source: *OCBC, CEIC*

We expect Bank of Thailand to continue its tightening cycle in 2023.
A late player into the hiking cycle, the BOT only started to raise its benchmark rate in August. Since then, it has only delivered a total increase of 75bps this year, over three consecutive meetings of 25bps each, bringing its benchmark rate from 0.50% at the start of the year to 1.25% as of 30 November 2022. The BOT has indicated its intention to deliver rate hikes in a gradual and measured approach. Given that BOT needs to play catch-up as real policy rate in Thailand is one of the lowest in the region, we expect it to deliver a total of 3 more 25bps hikes in 2023, which will bring its benchmark rate to 2.00% in 2023.

Vietnam: Exogenous headwinds

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- We expect Vietnam's GDP to moderate from 7.2% in 2022 to 6.5% in 2023 amid growing external headwinds. The favourable low base effects from 2021 have faded, while monetary conditions have tightened and the global demand outlook is also turning south. However, Vietnam is a beneficiary of FDI inflows on the back of the global push to diversify supply chains post-pandemic. Vietnam's growth prospects remain upbeat compared to many Asian economies.
- Inflation is likely to remain above the State of Bank Vietnam's (SBV) target of 4% in the near-term as consumer demand remains strong.
- We think the SBV will continue to deliver further rate hikes as it takes its cue from the US Fed to mitigate the weakening Vietnamese Dong as well as keep rising inflationary pressures under control.

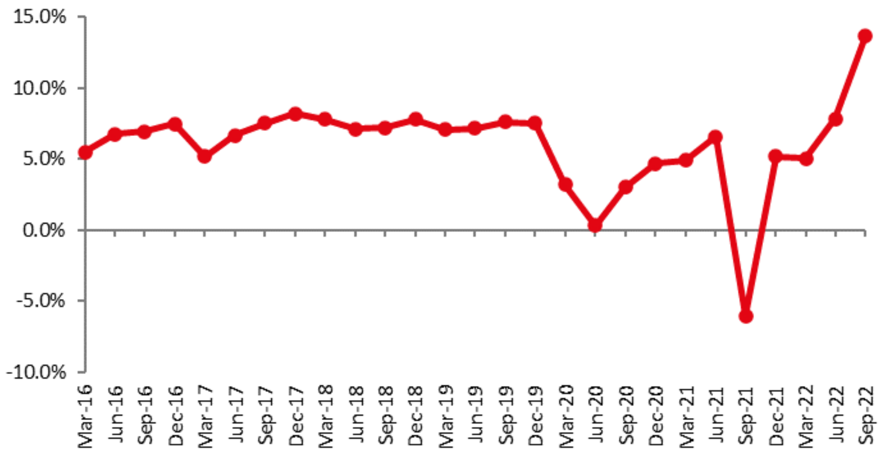
Upbeat growth momentum may start to come under pressure.
Vietnam saw a strong rebound in economic activity in the first nine months of 2022. GDP grew by 8.83% YoY in the first nine months of 2022, driven mainly by consumption (+7.26% YoY) and manufacturing (+10.69% YoY). The latest 3Q GDP also posted a gain of 13.67% YoY, marking the fastest pace of increase recorded since the first print in 2010.

However, its economic performance may have started to see signs of cracks as soft data on several data fronts have been observed. Firstly, industrial production snapped 5 consecutive months of double-digit growth to print at 6.3% YoY in October as manufacturing output slowed. Meanwhile, retail sales in October also moderated substantially as compared to the previous months of high growth, clocking a mere gain of 17.1% YoY which is slightly more than half the growth of 36.1% YoY recorded in August.

Furthermore, given that some of Vietnam's biggest export markets – US, China, EU, ASEAN and South Korea – face the risk of slowing growth, this may cause Vietnam's export demand to decline. For one, exports in October decelerated from 9.9% YoY in September to 5.2% YoY in October, marking the slowest pace since September 2021.

As we move into 2023, exogenous headwinds such as the slowing of several major economies and global financial tightening conditions shall pose as looming challenges that threaten to throw Vietnam off its current path of robust recovery.

Vietnam GDP, YoY Growth



Source: *CEIC, OCBC*

Upside risk to inflation

Headline inflation finally broke past the State Bank of Vietnam's (SBV) inflation target of 4% in October, printing at 4.30% YoY. This was mainly driven by education (+10.64% YoY), housing and construction materials (+5.42% YoY), food and food services (+5.13% YoY) prices. While almost all the CPI components saw an increase in prices in October, the cost of transport in particular, eased from 6.68% YoY in September to 1.81% YoY in October. However, recent concerns about gas supply stoppage/shortages have emerged as some gasoline pump stations in southern Vietnam cities and even Ho Chi Minh City have temporarily shut down or limited sales after suffering profit losses resulting from the government's cap on retail gas prices and fuel importers' difficulty in obtaining credit from banks.

The government has decided to re-adjust fuel prices every 5 instead of 10 days to mitigate the effect of currency fluctuation on gas import prices. However, should fuel supply shortage still persist amid high consumer demand, this may cause fuel prices to surge once again. We expect inflation to remain on the upside as consumer demand and economic activity continue to recover. These could pose headwinds to its economic recovery as costs for transportation and commodities including fertilizers and animal feed, could also raise prices for domestic goods and services, according to the IMF.

Source: *CEIC, OCBC*

The State Bank of Vietnam is likely to extend its hiking cycle.
Since kicking off its hiking cycle on 23 September, the State Bank of Vietnam (SBV) has delivered a total of 200bps hike – 100bps each in two consecutive months of September and October 2022. This brought the discount rate and refinancing rate to 4.5% and 6.0% respectively, following the second unscheduled rate hike on 25 October. These outsized and accelerated moves were made in an attempt to mitigate inflation risks and stabilise the Vietnamese Dong which has come under much pressure since other hawkish central banks, especially the Fed, started to raise their interest rates. As the Dong is expected to remain under pressure given the global tightening conditions and inflation likely to remain above its 4% target, we see further hikes as a possibility at least in the near-term.

The IMF has called for fiscal policy to play a leading role in facilitating the economic rebound. There is also a need to continue closely monitor bad loans in the banking system and potential real estate market risks, while pushing ahead with further economic reforms in key areas like labour, regulations and the environment.

What does Chinese modernization mean?

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- There are five important features of Chinese modernization.
- There is no existing model for China to copy to realize its modernization.
- Chinese modernization is the Chinese way of an ESG strategy. E stands for sustainable growth. S stands for common prosperity and G stands for peaceful development.
- The pursuit of Chinese modernization will not lead to the return to a planned economy and China's economic decoupling.

As one of the key takeaways from China's Communist Party's 20th Party Congress, the term "Chinese modernization" caught global attention. According to Chinese President Xi, Chinese modernization is the cornerstone for China to achieve its great rejuvenation. The Party will create an alternative to Western modernization.

In the global stage, China's pursuit of alternative path to modernization led to two questions among investors. First, does Chinese modernization mean the return to a planned economic model or pivot away from the market driven economic model? Second, does the alternative path China offers mean the rising risk of decoupling with the western world?

In order to address those questions, it is essential to understand CPC's central task as well as key features of Chinese modernization. As mentioned by the 20th Party Congress, the key task of the CPC for the second centenary goal is to build China into a great modern socialist country and to advance the rejuvenation of the Chinese nation. This comprises of two aspects including the socialist nature and Chinese cultural genes. Chinese modernization is the tool for CPC to realize its second centenary goal.

There are five important features of Chinese modernization as shown below in the table.

Table: five features of Chinese modernization
Modernization of a huge population
Of common prosperity for all
Of material and cultural-ethical advancement
Of harmony between humanity and nature
Of peaceful development

Chinese modernization is the modernization of 1.4 billion population, a number larger than the combined population of all developed countries in the world. With limited resources such as arable land and freshwater which only account for 9% and 6% of global share respectively, China feeds almost 20% of the global population. After China has successfully lifted 800 million population out of poverty over 40 years, there is no existing model for China to copy to realize modernization.

What does this mean for us?
ESG has been the buzz word for global investing community in the past few years. However, when it comes to ESG investing, one size does not fit all. From macro perspective, **we think Chinese modernization is China's way of ESG strategy.**

E: Sustainable Development
China has reiterated to keep its timeline for carbon peak and carbon neutrality. China plans only to spend 30 years to achieve carbon neutral from carbon peak which usually takes most developed economies 50-70 years. China has led in pushing for renewable energy such as the production and consumption of renewable energy vehicle.

In addition, China also hosts the 14th Conference of the Parties to the Convention on Wetlands (COP 14) in early November and promised to draw up a new national blueprint to promote infrastructure construction projects and legal systems for wetland protections.

Meanwhile, the promotion of two environmental experts into 24-member Politburo, China's top policy making body, in 20th National Party Congress also showed China's ambition towards a low carbon country. The harmony between humanity and nature will be one of the most important playbooks for the next decade, which will deliver benefits to people around the world.

S: Common Prosperity
The rising populism in the western countries was mainly sparked by the unfair distribution of wealth. Common prosperity is the key for Chinese modernization to narrow the income gap. As mentioned by Chinese government, China will grow the economic cake bigger first before equitable distribution. Primary distribution will play a major role and redistribution via way of fiscal measures and tertiary distribution such as the charity will follow.

In order to optimise the primary distribution, a good development environment is critical for enterprises. Given those SMEs are responsible for majority of job creation in China, creating a good business environment is important. In contrast to speculations that China may dial back from the market economy, we think China will boost the vitality of private sector.

G: Peaceful Development
As one of the key beneficiaries from the post-World War 2 peace dividend, it is in China's interest to continue to promote the peaceful development. China's path to peaceful development is also inherited from its cultural genes which value peace. Chinese rich history shows that peace usually leads to development.

According to China's Foreign Minister Wang Yi that "China is the only country in the world that pledges to "keep to a path of peaceful development" in its Constitution. It is the only one among the five Nuclear-Weapon States that is committed to no-first-use of nuclear weapons." As such, we think under the framework of Chinese modernization, China is unlikely to engineer an unprovoked military clash.

In addition, China will continue to stick to its commitment to open up at a higher level. China's President Xi concluded his first week-long overseas trip after the 20th Party Congress reassuring China's support for true multilateralism, inclusive development as well as open regional cooperation for the prosperity of the Asia-Pacific. President Xi's packed diplomatic schedule including about 20 one-to-one meeting with global leaders in both Bali and Bangkok in November showed China's increasing effort to re-engage with the world.

To conclude, we do not think the pursuit of Chinese modernization will lead to the return to a planned economy and China's economic decoupling. Instead, the key features of Chinese modernization including sustainable growth, common prosperity and peaceful development will continue to require China's support to the market economy.

Hong Kong's re-export trade in the post-pandemic and post-RCEP era.

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Hong Kong has lost its shine as an export conduit for China

Hong Kong has long been an important entrepot for China, leveraging on its free trade policy, separate custom status, proximity to the manufacturing base in Guangdong province, and world leading logistics facilities. In 2021, over 97% of the merchandise exports from Hong Kong was re-exports, and 51.4% of the re-exports was sourced from mainland. However, it is noted that the pace of growth in Hong Kong's total merchandise re-exports had slowed notably in recent years, from the average of 9.4% in 2002-2011 to 4.1% in 2012-2021. In particular, growth of re-exports of mainland origin largely stagnated in recent years. Exports to Hong Kong as a share of China's total exports also declined steadily, from around 20% in 2000 to less than 10% in 2022.

Both cyclical and structural factors can be attributed for Hong Kong's diminishing role as an export conduit for mainland China. On the domestic front, Hong Kong is losing its appeal as a transhipment port, due to the high operating cost, limited port/container yard space, and worsening congestion. On the external front, the relocation of industrial base from the Pearl River Delta to other parts of China or other Asian economies with lower labour cost has undermined Hong Kong's competitive edge of having a short distance to cargo sources. Added to that, both port facilities and logistics services in the mainland had been substantially transformed and upgraded over the years. As the result, more regular shipping routes between mainland and other trading partners had been established, making it more cost effective for exporters and manufacturers to export their goods directly from mainland instead of routing through Hong Kong. Lastly, Hong Kong's outward gateway function gradually declined, as China gained access to WTO and introduced more trade liberalisation measures.

Chart 1: Growth of Hong Kong's re-exports slowed

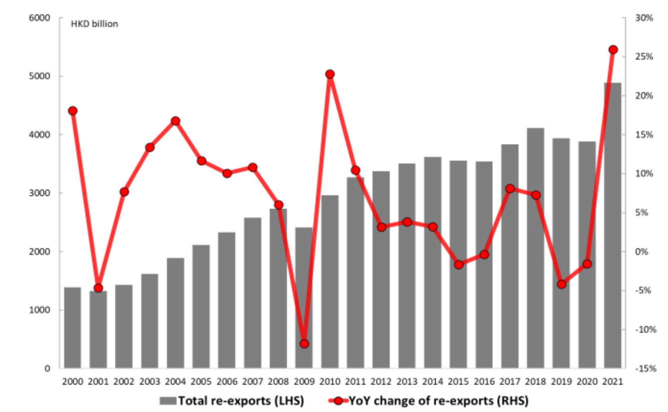
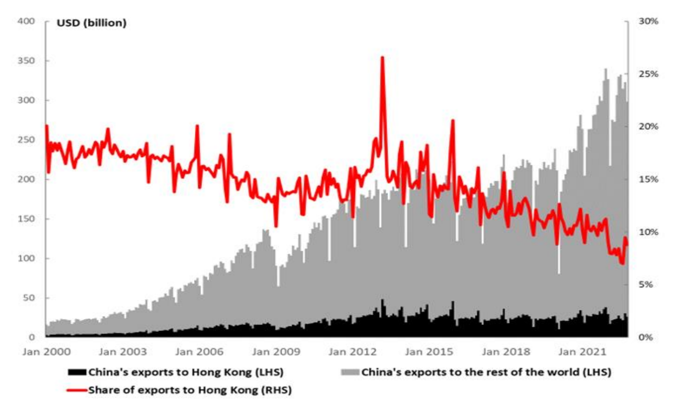


Chart 2: China's share of exports to Hong Kong fell

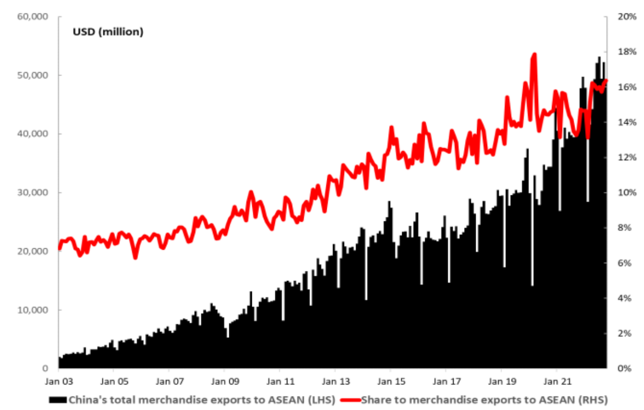


Source: *Bloomberg, HK Census and Statistics Department, OCBCWH*

Table 1: Hong Kong's re-exports by origin in 2021

Rank	Economy	Value of re-exports (HKD billion; share to total %)
1	Mainland China	2,514 (51%)
2	Taiwan	688 (14%)
3	South Korea	372 (8%)
4	ASEAN	329 (7%)
5	Japan	235 (5%)

Chart 3: China's exports to ASEAN climbed



Source: *Bloomberg, HK Census and Statistics Department, OCBCWH*

Growing re-export demands from other Asian economies

The growing demands from other Asian economies however had become a promising driver of Hong Kong's merchandise re-exports. Specifically, total re-exports originating from Taiwan, South Korea and ASEAN showed remarkable growth in the past decade. In 2013-2021, re-exports from these economies expanded by an average of 13.2%, 12.8% and 4.5% respectively per annum, way above that of mainland origin at 2.0%. Hence, their shares to Hong Kong's total re-exports in value terms jumped from 6.5%, 3.7% and 6.5% in 2012, to 13.7%, 7.6% and 6.7% respectively in 2021.

New landscape under the "China-plus-one" / "China-for-China" strategy

Recognising the problem with over-reliance on a single market during the pandemic, many multinational corporations started to seek a broader list of suppliers/customers/logistic providers during the manufacturing process. Added to that, China's adherence to the Covid zero policy, higher labour cost and simmering geopolitical tensions also pushed businesses to moved part of the China-based manufacturing elsewhere and retain only part of the capacity that services the domestic market in China.

Against this backdrop, businesses set their eyes on ASEAN as an alternative to China, and paced up their supply chain restructuring. Market expected this "China-plus-one" or "China-for-China" strategy would gain further tractions in periods ahead, hence resulting in profound changes to the landscape of merchandise trade in the region. In 2020, ASEAN had overtaken EU as China's largest trading partner in merchandise trade. In the first 10 months of 2022, merchandise exports to ASEAN accounted for 15.6% of the total exports of China, up from 9.9% in 2012.

Re-exports demand driven by tighter coupling of regional supply chains

In the post-Regional Comprehensive Economic Partnership (RCEP) and post-pandemic era, intra-regional trade continued to boom. In addition to the tariff cut, the restructuring and tighter coupling of regional supply chain was behind the flourishing trade, as evidenced by the substantial growth in re-exports of "raw materials and semi-manufactures" from China and ASEAN in the past few years according to Hong Kong's trade statistics.

Chart 4: Re-exports to ASEAN via Hong Kong

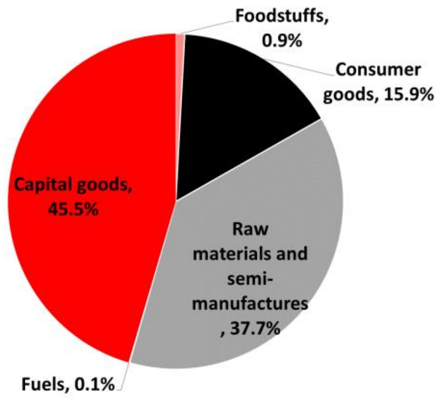
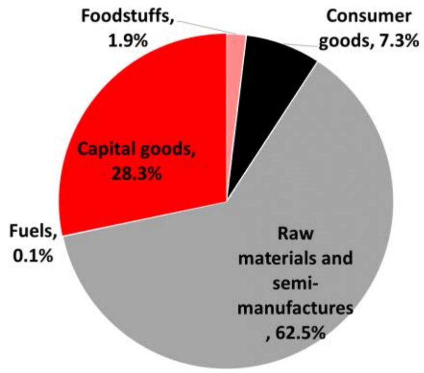


Chart 5: Re-exports to mainland via Hong Kong



Source: *HK Census and Statistics Department, OCBCWH*

Re-exports to/ from ASEAN

Re-exports of "raw materials and semi-manufactures" and "capital goods" to ASEAN expanded by the most in 2013-2021, by a total of 104.6% and 53.5% respectively during that period. While that of "consumer goods" only grew by 11.2% cumulatively. On the other hand, re-exports of "raw materials and semi-manufactures", "capital goods" and "consumer goods" from ASEAN soared by a total of 161.0%, 72.7% and 99.8% respectively.

Re-exports to/ from mainland China

As for re-exports from mainland China, only "raw materials and semi-manufactures" and "capital goods" recorded growth by a total of 74.0% and 30.1% respectively in 2013-2021. Yet, that of "consumer goods" dropped by 42.5% cumulatively. On the other hand, re-exports of "consumer goods" to mainland China surged by 99.8% cumulatively, while that of "raw materials and semi-manufactures" and "capital goods" expanded by 161.0% and 72.7%.

Is Hong Kong the ASEAN-China nexus?

Yes and no. Yes, Hong Kong has played an active role in the re-export of goods between mainland China and ASEAN. In 2013-2021, re-exports originating from mainland China to ASEAN via Hong Kong increased by an average of 4.3% per annum (accounting for around 71% of total re-exports to ASEAN). Over the same period, re–exports originating from ASEAN to the mainland via Hong Kong surged by an average of 8.6% annually, accounting for 80% of ASEAN's re-exports handled by Hong Kong.

While re-exports originating from mainland China to ASEAN recorded solid growth, its share over the total merchandise exports from mainland to ASEAN fell notably, from over 10% in early 2012 to less than 5% in September 2022, indicating Hong Kong 's diminishing role as an entrepot in for China' exports. Meanwhile, Hong Kong is still considered a key gateway to mainland China by ASEAN economies. Hong Kong's re-exports originating from ASEAN to mainland remained on an uptrend, increasing by 7.3% YoY in the first 9 months of 2022.

Chart 6: Diverging trend for Hong Kong's re-exports

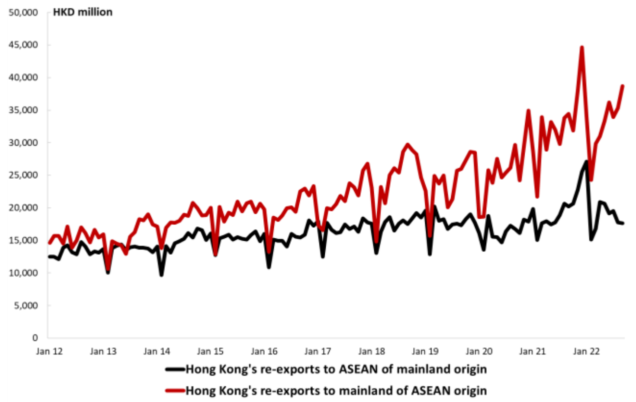
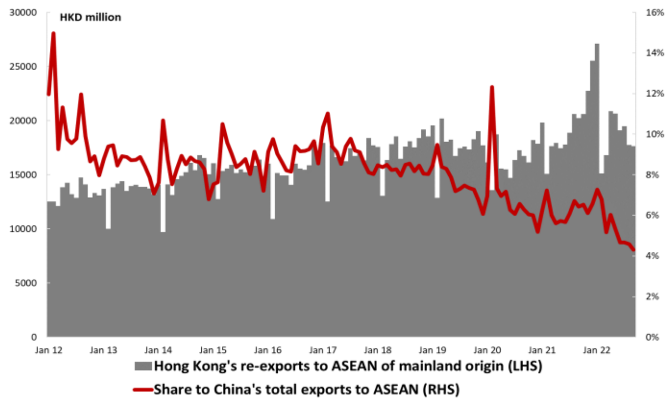


Chart 7: Share of Chinese exports routed via Hong Kong



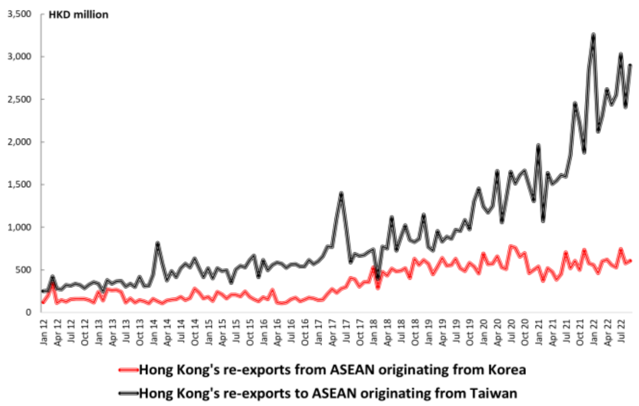
Source: *Bloomberg, HK Census and Statistics Department, OCBCWH*

Hong Kong to look beyond ASEAN-China trade

As China's exports grew increasingly independent of Hong Kong - a hard trend to reverse, Hong Kong can strive to play a key role in serving as the co-ordinator and connector in ASEAN's merchandise trades with other economies in the region. In fact, we see growing re-export demands from Taiwan and South Korea, aside from ASEAN increasing re-exports to mainland China. Total re-exports to ASEAN originating from Taiwan and South Korea via Hong Kong surged by an average of 21.8% and 14.1% annually in 2013-2021, way above the growth trend of these two economies' direct merchandise exports to ASEAN.

Hong Kong should utilise its edge as gateway to China, the Free Trade Agreement and the long-established ties with business partners in the region to meet future export demands from economies in the region. Riding the tide of closer regional economic collaboration in the post-RCEP and post-pandemic era, the growth in the merchandise trade routing from Hong Kong is likely to re-accelerate in the future.

Chart 8: Re-exports demand from Taiwan and Korea



Source: *HK Census and Statistics Department, OCBCWH*

What progress has Greater China made on CBDC?

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- While cryptocurrencies emerged just over a decade ago, market participants have been speculating about a decentralized paradise. Today, central banks worldwide are moving in different directions and accelerating their efforts to develop their own digital currency vision.
- The digital yuan has made remarkable progress in 2022 with the launch of the e-CNY app. China presented the first exhibition on an international scale during the 2022 Beijing Winter Olympics. Even though the digital yuan is still in its experimental phase, its potential growth and development may serve as a crucial pillar in technological infrastructure.
- The Hong Kong Monetary Authority reportedly plans to adopt a three-step path to prepare for the potential deployment of a digital Hong Kong dollar (e-HKD). HKMA will undertake foundational work on the technology and legal implications of the e-HKD in the fourth quarter of 2022. This move is considered a key breakthrough for the city to catch up with other central banks.

The race for central bank to launch their version of digital currencies
While cryptocurrencies emerged over a decade ago, market participants have been speculating about a decentralized paradise. Today, global central banks are moving in different directions and accelerating efforts to develop their own digital currency vision. Still, nowhere is happening faster than China. In 2014, China's central bank has started its own digital project called "Digital Currency Electronic Payment" (DCEP). With the key goal of expanding its support to domestic retail payments and alternatives to non-bank platforms, the People's Bank of China (PBoC) launched its pilot program in May 2020. As of August 2022, the pilot tests extended to 21 areas in 15 provinces with over 140 million registered users. Elsewhere, 4.6 million merchants, businesses, and consumers exchanged 83 billion through "e-CNY, digital yuan officially known as Digital Currency Electronic Payment (DC/EP)."

According to a recent press conference, PBoC governor advocated expanding the digital yuan with the smart contracts technology. He stated China's aim is to enhance foreign exchange, while the HKMA intends to start a trial of e-HKD in the fourth quarter of 2022.

The role of e-CNY
Since 2014, China has been investigating the possibility of developing its digital currency. With the "two-tier" issuance system, digital cash is designed to replace narrow money or M0, thus reducing the circulation cost of banknotes and coins. The rationale here is threefold. First, if the money system becomes fully digitalized, CBDCs will allow the public to access fiat currencies. Second,

PBoC can leverage on commercial bank's advanced IT systems to help distribute the digital currency. Third, unlike the one-tier system, where central bank will issue digital currency directly to retailers, the two-tier system will help improve efficiency and avoid delays. For example, the two-tier system would help customers who have transferred deposits away from the commercial banks to hold central bank's digital currency due to the central bank's perceived high credit rating. The two-tier system is essential to ensure financial stability.

Table 1: Pilots Stages of e-CNY

Pilots Stages of e-CNY	Total	Date	Amount processed	New Areas coverage
Stage I	4+1	End of 2019	RMB 1.1 bn	Shenzhen, Suzhou, Xiongan, Chengdu and Winter Olympics scenarios in 2022
Stage II	10+1	Nov 2020	RMB 2 bn	Shanghai, Hainan,Changsha, Xian,Qingdao, Dalian
Stage III	23+1	Mar 2022	RMB 62 bn (Nov 2021)	Beijing, Zhangjiakou, Tianjin, Chongqing Municipality, Fuzhou, Xiamen, Hangzhou, Ningbo, Wenzhou, Huzhou, Shaoxing, Jinhua

Source: *PBoC, Reuter, OCBCWH*

The year of the digital yuan and its opportunities for China

Launching the digital yuan wallet is a key step forward in terms of creating and marketing the Chinese digital currency. During the early phases of the pilot testing in 2020, the digital yuan wallet was integrated into mobile banking apps while staying distinct from the regular bank account. This year, the digital yuan has made remarkable progress, especially with the launch of the e-CNY app on an international scale during the 2022 Beijing Winter Olympics. As of September 2022, the cumulative number of e-CNY pilot version app downloads hit 142 million. Even though the digital yuan is still in its experimental phase, its potential growth and development may serve as a crucial pillar of the technological infrastructure.

Domestically, the digital yuan has been widely acknowledged and used across the financial sector, which includes wealth management, loans, and insurance services. In terms of corporate loans, the Agricultural Commerce Bank of Zhangjiagang issued the first loan in digital yuan to finance a local steel factory in August 2022. Meanwhile, the China Construction Bank launched digital yuan for purchasing wealth management products through mobile apps. On the other hand, the tech giant JD Group has been using digital yuan to pay its suppliers and is currently exploring its application in corporate payment. Furthermore, Meituan said it would start its carbon neutrality pilot program with the e-CNY. Finally, besides B2C applications, the scope of digital yuan applications has expanded to medical and healthcare services, public transportation, and government services. For future coverage, we do not rule out more trials such as business-to-business and government payments in digital yuan.

Chart 1: Digital Yuan Operators

Chart 2: Estimated Cumulative downloads (Android +IOS) of e-CNY (Pilot version)

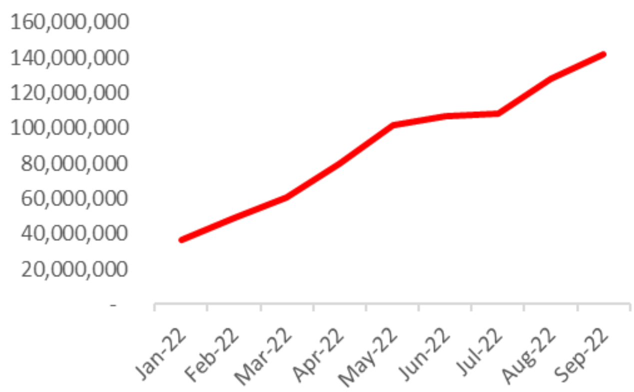


Chart 3: e-CNY app downloads by categories (Android)

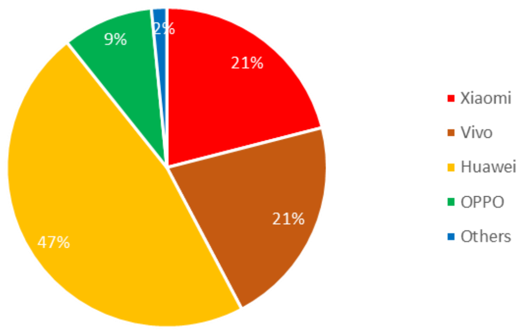


Chart 4: e-CNY (Pilot version) app

Chart 5: Scope of digital yuan application

Source: *Kuchuan, Qimai, PBoC, OCBCWH*

Table 2:	Summary of the key development
2014	China's central bank names its digital project as "Digital Currency Electronic Payment"
December 2019	The PBoC announced to start of its trial program conducted by the four state-owned commercial banks (ABC, ICBC, CCB, and BOC) and three telecom carriers (China Telecom, China Mobile, and China Unicom) to distribute the digital yuan.
August 2020	The trial program expands to other cities, including Hong Kong and Macau. They also test the digital wallet app with different scenarios, including payments using QR codes and sending funds without internet. In the same month, two more commercial banks joined the digital yuan trials, including China CITIC Bank and the Postal Savings Bank of China.
October 2020	The Shenzhen government gives away a total of RMB 10 million worth of digital yuan in 50,000 red packets to local citizens. In the same month, more than 47,000 consumers spend about 8.8 million yuan in 3,4000 local stores through digital yuan, with 62,000 transactions taking place.
February 2021	Chengdu government announces a total of 40 million digital yuan via lottery. Meanwhile, two financial giants, Mybank (backed by Alibaba) and Webank (backed by Tencent) are reported to join the digital yuan pilot program.
April 2021	The PBoC announces incorporation with HKMA for technical testing on the cross-border use of digital yuan. In the same month, Macau Chief Executive Ho Lat-Seng states the government's intentions to amend laws to regulate the issuance of virtual legal tender.
July 2021	The PBoC releases its first white paper to discuss the development of its digital currency, while Shanghai outlined its plan to use the digital yuan for cross-border trade finance.
October 2021	HKMA published a technical whitepaper titled "e-HKD: A technical perspective" to explore potential technical design options for issuing and distributing retail CBDCs. For the retail CBDC, there will be a retail system for commercial banks to distribute and circulate either rCBDC or CBDC-backed e-money, according to the white papers. Also notable is that , the whitepaper unveils a technical architecture that preserves both privacy and traceability and is designed based on key principles of safety, efficiency, openness to change, innovation, and competition. On top of these, the HKMA may also have to consider the implications of the banking system and cross-border capital flows.
December 2021	The PBoC announces plans to work with HKMA attempt to make cross-border market payments easier via the Hong Kong Fast Payment System. The director of the digital currency institute of HKMA states that the project's goal is to create an inclusive and co-constructed ecosystem between the two places.

January 2022	China releases a pilot version of "e-CNY" on its mobile application, available on Android and Apple stores.
February 2022	Over two million digital yuan are used daily at the Beijing Winter Olympics.
May 2022	The city of Shenzhen announces plan to hand out 30 million digital yuan and 50 million worth of digital yuan in Hebei. Both events took place with an app called, The Airdrop, where users can receive corresponding credit in digital currency as a gift by lottery. Users had the chance to win either 88, 100, or 128 digital yuan upon registration. In Hong Kong, HKMA Chief Executive states the pilot program for the cross-border retail use of e-CNY is expected to roll out in June. According to his statement, three note-issuing banks will participate in this upcoming test, including Standard Charted, Bank of China and HSBC. Further adoptions of a digital yuan wallet through FPS (a payment infrastructure that allows cross-bank payments in HKD and RMB by simply entering phone numbers or email addresses), and payments transfer between consumers and merchants would be the key objectives for this testing.
June 2022	The pilot program for digital yuan becomes available in 23 cities across China. The "e-CNY" can be used for taxes, medical expenses, bank loans, and wealth management products.
August 2022	The Agricultural Commerce Bank of Zhangjiagang, a Suzhou bank announced issuing a loan of 500,000 worth of digital yuan to finance steel factories. With this loan, users can make payments completely within the user's wallet and the CBDC platform. Hence, regulators can monitor fund flows and track any suspicious activities.
Sep-22	PBoC calls to expand the digital yuan with smart contracts to enhance the eCNY role of better protecting consumer rights and lowering transaction costs. HKMA plans to launch trial of e-HKD in 4Q22 with three critical path approaches: 1) foundational infrastructure with wholesale layer, 2) the wallet app 3) production rollout.
Oct-22	The Hong Kong Monetary Authority concluded the largest cross-border Central Bank Digital Currency (CBDC) pilot scheme, in which 20 banks in four jurisdictions used the mBridge platform to conduct over 160 payment and foreign exchange transactions totalling more than HK$171 million.

Source: *Local news reports, PBoC, Reuters, SCMP, and Bloomberg*

The path to RMB internalisation and its opportunities

Thanks to efforts from the domestic authorities and financial institutions, there has been a noticeable push on e-CNY's visibility in recent years. Because the e-CNY trials have gone beyond retail to cover corporate payments and loans, the digital yuan will play a significant role in China to speed up RMB internationalism.

Regarding cross-border payment, HKMA, the Bank of Thailand, and the Bank of International Settlements jointly launched the Multilateral Central Bank Digital Currency Bridge (mCBDC Bridge) project in February 2021 with the intention to track and critically analyze the processes, mechanism, and utility of using a central bank digital currency for cross-border financing. The project later introduced 15 potential application scenarios, including cross-border e-commerce, international trade settlement, and supply chain finance. In addition, since the PBoC does not specify the need for local ID in some types of the e-CNY wallet, foreigners and international tourists can qualify to open those wallets to meet their basic needs (with an annual limit of 50,000 yuan) with digital yuan. Digital yuan can then flow easily across borders for foreigners and non-Chinese residents.

There are four main benefits for businesses using e-CNY. The first benefit is that e-CNY will reduce FX risks in cross-border trade. A foreign company can better manage FX risk by minimising its exposure to multiple currencies. Instead of using USD to convert local currency, the digitization of RMB would attract more cooperate or foreign inflows to the offshore RMB liquidity pool. Second, the benefit of transactional convenience with the digital yuan. The e-CNY provides a new transactional efficiency with real-time transaction speed, offline payments support and zero transaction fees thanks to the payment revolution. The third benefit is unlocking business potential. Businesses could have stronger relationships with their Chinese partners with greater price transparency by avoiding dollar exposure. Finally, the potential of expanding the simplification of smart contracts between businesses. As the PBoC identified programmability as a vital element of the digital yuan in a recent white paper, seamless programmability will allow the e-CNY to better support smart contracts to self-execute payments and eliminate the need for intermediaries in trade finance. To this point, by using e-CNY to simplify smart contracts between businesses, businesses can improve efficiency, enable transparency, and safety of commercial transactions.

Table 3: Type of digital yuan wallet

	Type one	Type two	Type three	Type four (No Real Name Registration Required)	Type Five (No Real Name Registration Required)
Opening requirement	Mobile phone, ID, Bank account, an in-person filled up application form at authorized bank branch	Can be open remotely with ID, mobile phone and a bank account	Can be open remotely with ID, mobile phone and a bank account	Can be open remotely with moblie and email	Can be open remotely with moblie and email
Bank account requirement	Bank account at an authorized branch	Domestic bank account	N/A	N/A	N/A
Single payment limit	No limit	50,000	5,000	2,000	500
Daily payment limit	No limit	100,000	10,000	5,000	1,000
Annual balance limit	No limit	No limit	No limit	50,000	10,000

Source: *Mpaypass.com.cn, PBoC, OCBCWH*

Chart 6: China M0, M1, M2 as a % of GDP

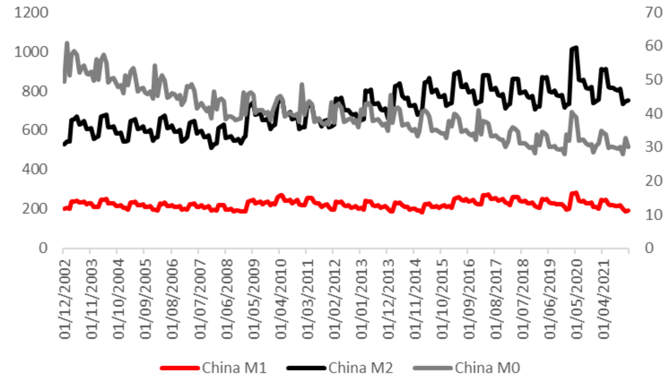
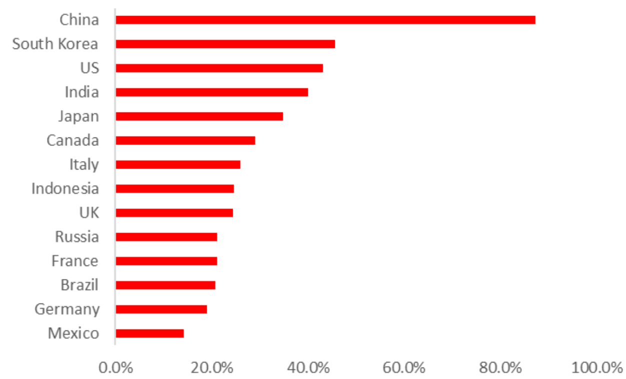


Chart 7: Mobile payment user penetration (% of smartphones), 2021



Source: *Bloomberg, eMarketer, OCBCWH*

The Progress of the e-HKD

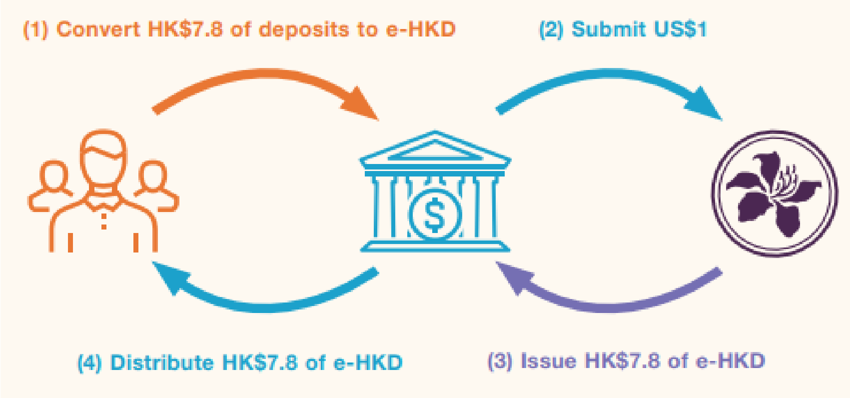
During the June 2021 HKMA "Fintech 2025" strategic announcement, the research of e-HKD drew the most significant market interest. Under the strategic plan, beyond supporting the technical testing of eCNY in Hong Kong and working on other digital currency projects with various central banks, the HKMA has also established a working group to research the technology and regulatory problems on the e-HKD at the wholesale and retail levels.

The impact on the linked exchange rate system is believed to be limited so far. In its paper "E-HKD Charting the Next Steps", the HKMA explained that the primary purpose of issuing e-HKD is to replace physical equivalents with rCBDC. Also notable is that, as of 2021, the certificate of indebtedness (i.e., notes/coins in circulation issued by note-issuing banks) only accounted for 27.8% of the monetary base. Therefore, the mechanism of issuance should not significantly affect the linked exchange rate system, while the monetary base will likely remain the same.

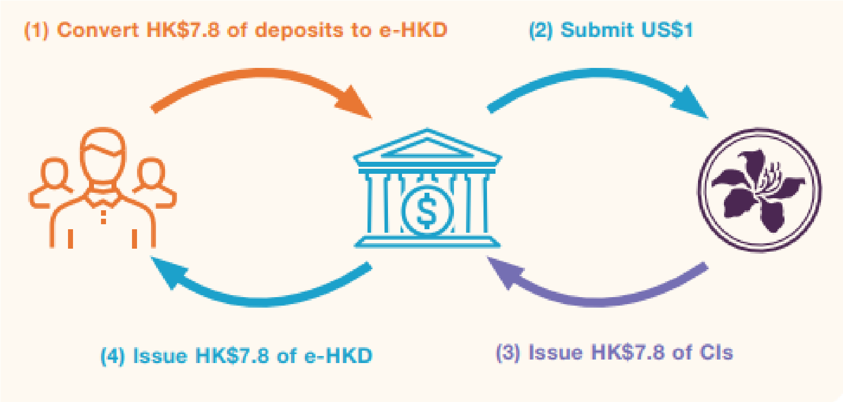
The three potential approaches of the e-HKD issuance mechanism

There are three design considerations to match the HKMA currency board principles. The first design consideration is the coin approach. Under this case, HKMA would be the sole issuer with agent banks acting as customer distributors. Secondly, the bank note approach where banks submit USD for a certificate of indebtedness. To be precise, designated banks would issue the e-HKD, which would then become the liabilities of the designated bank. The USD would back the designated banks via a certificate of indebtedness. The third design consideration is an aggregate balance approach. With this, the e-HKD would be issued in the similar way of issuing Exchange Fund Bills and Notes to agent banks.

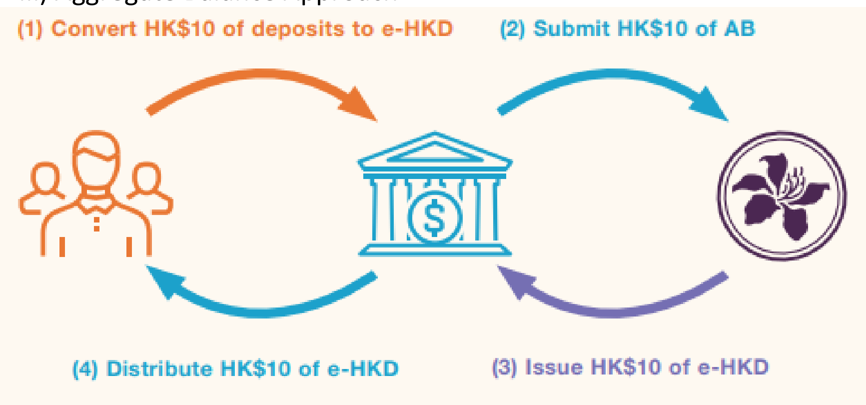
i) Coins Approach



ii) Banknote Approach



iii) Aggregate Balance Approach



Debate heats up with more solid steps

Moving forward, the Hong Kong Monetary Authority reportedly plans to adopt three tiers to prepare for the potential deployment of the e-HKD. The central bank will undertake foundational work on technology and legal implications of the e-HKD in the fourth quarter of 2022. In a recent disclosed document, the central bank explains the characteristics of each tier. Prior to any other conduct, Tier One intends to lay the technological and legal premise for supporting the creation of Hong Kong CBDC. Tier two will oversee HKMA conduct “through investigations into use cases as well as application, implementation, and use of wallet involving e-HKD.” Finally, Tier Three would ensure the implementation and will set the launch schedule for e-HKD”. Through this trial program, identified banks, payment providers, and other financial technology organizations will be able to test transactions using the e-HKD.

In addition to the pilot for domestic use, the Hong Kong Monetary Authority has also completed a cross border Project on mBridge just recently in Oct 2022. To this point, the project was involving in settling real-value transactions in CBDC from each of the four participating jurisdictions (the Bank of Thailand, the Digital Currency Institute of the People’s Bank of China and the Central Bank of the United Arab Emirates, the Hong Kong Monetary Authority) directly on the mBridge ledger. A total amount of over HK$94 million of CBDCs was issued onto the platform, while over HK$171 million of payments and foreign exchange instantly settled across borders.

Taken Together, with Hong Kong is being more proactive in accelerating their journey towards digitization, these efforts are considered to be a key breakthrough for the city to catch up with other central banks that are introducing virtual. While the deployment of the mBridge technology infrastructure should unlock the functionality and features to cross-border payment, this potential deployment would likely further promote the market integration across the Greater Bay Area as well as having a positive impact on the financial ecosystem.

Charging Up

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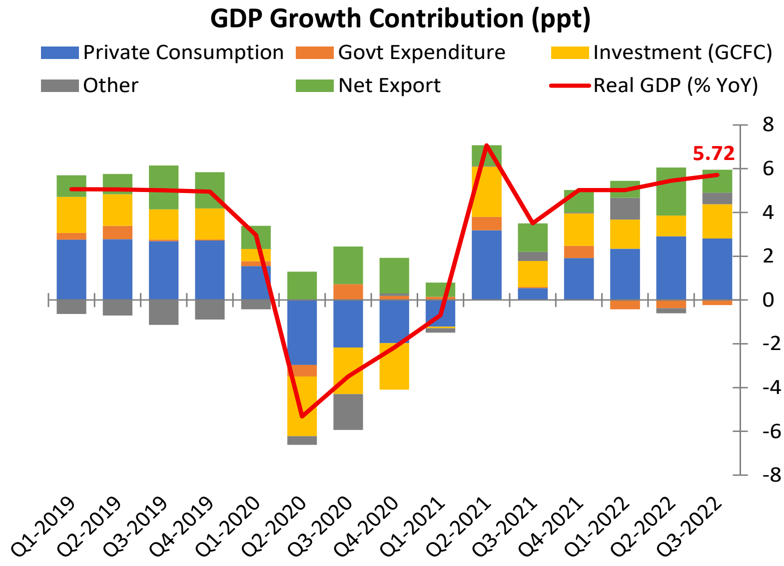
Amid mounting global risks such as pressure from energy and food inflation, geopolitical uncertainty, prolonged pandemic uncertainty in China, and widespread fears of a global recession, the Indonesian economy has grown above 5% YoY since the 4th quarter of 2021. Indeed, in its latest long term projections, the IMF even anticipated growth momentum to be maintained in the range of 5% until 2027. On various occasions, several state officials have continued to echo the statement of the IMF Chief, Kristalina Georgieva, regarding Indonesia's economic position as a “bright spot” in the midst of a “perfect storm.”

Not without reason. Domestic consumption, which contributes more than 50% to Indonesia's GDP, has accelerated in line with the increasing community mobility which now has exceeded the pre-pandemic levels. Purchasing power has also been supportive despite increasing price pressure, although at 5%, Indonesia's inflation is still relatively more controlled than the region.

Familiar Story

Apart from domestic consumption, it is no stranger that Indonesia's economy is also heavily supported by its abundant natural resources, where commodity products constitute at least 55% of total exports (UNCTAD 2021). Moreover, export contribution to the overall economy is quite substantial, around 25%. As such, Indonesia has benefited quite significantly from the surge in prices and also the export volume of several key commodities such as coal and palm oil this year, although, unfortunately, this episode was largely caused by the tragedy of Russia's invasion of Ukraine.

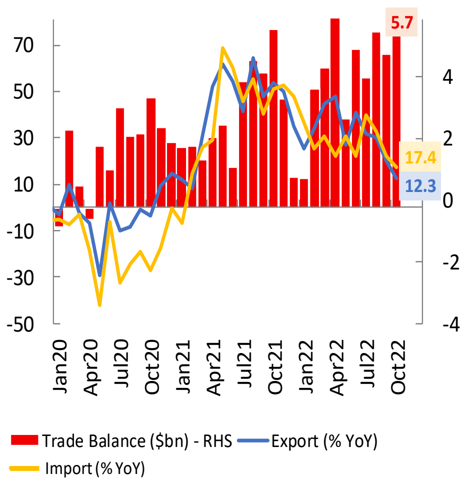


Source: *Statistics Indonesia (BPS), OCBC*

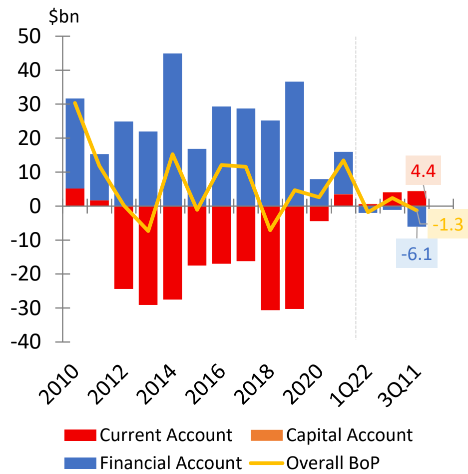
In fact, the net exports component has been the only driver capable of consistently contributing positively to Indonesia's overall economic growth since the first quarter of 2019, with an average headline growth contribution of 1.28% per quarter. Beyond export earnings, the multiplier effect can be seen through the higher fiscal revenues, which can then be optimized into various stimulus by the government, including Direct Cash Assistance to energy subsidies for the vulnerable affected by soaring global food and energy prices.

The vital role of commodities is also clearly reflected through their role as a buffer for financial market stability, particularly in light of the recent relative stability of the Rupiah exchange rate. Most recently, the trade balance recorded a surplus of US$5.67 billion in October to mark 30 months of consecutive surplus. Thus, the surplus in the first ten months of this year has reached US$45.5 billion, exceeding US$30.9 billion last year in the same period.

30 Consecutive Months of Surplus



Balance of Payment



***Source:** Statistics Indonesia (BPS), Bank Indonesia, OCBC*

Positive developments in the trade balance have also contributed to bringing Indonesia's current account balance from a prolonged annual deficit since 2012 to a surplus in 2021, reaching US$3.3 billion or around 0.3% of GDP. In the third quarter of 2022, the current account surplus reached US$4.4 billion, about 1.3% of GDP, and overall reached US$8.7 billion in the first nine months of this year. Bank Indonesia also anticipates that Indonesia's current account balance will continue its annual surplus this year, reaching 0.4% to 1.3% of GDP.

This positive performance in the current account balance has cushioned the pressure on the rupiah this year, especially amidst portfolio investment capital flows which have been under pressure since the beginning of the pandemic uncertainty in 2020. Until October 2022, net capital outflows were recorded at US$4.6 billion, higher than US$2.2 billion in 2021 but much better than US$7.9 billion in 2020. All in all, the Rupiah 'outperformance' has become the highlight, with the currency 'only' depreciating 8.62% YTD against the US dollar until October, better than Yen, Won, and Renminbi depreciation of up to 22.6%, 16.5% and 12.9% respectively during the same period.

Anticipating Risks

However, despite Bank Indonesia's start of the rate hike cycle in the second half of 2022, selling pressure continues, particularly in the bond market. In the third quarter of 2022, the Capital and Financial Accounts recorded a deficit of up to US$6.1 billion, higher than the US$1.2 billion deficit in the previous quarter and indicating the deepest deficit since 2011. Of course, the accelerated deficit is in line with the aggressive interest rate hike cycle in 2022, especially by the Fed. The more aggressive monetary tightening by the Fed compared to other central banks, including in Indonesia, made investors flock to the US Treasury bond market to obtain higher yields. Accompanied by the overall risk-off sentiments in the majority of 2022, the phenomenon of 'flight-to-quality' has contributed to the strengthening of the US dollar, where the dollar index DXY touched its strongest level in more than two decades.

With the Fed proving to be much more hawkish with a 375bps rate hike as of November 2022 compared to Bank Indonesia which 'only' increased interest rates by 175bps, the yield differentials between respective nations' 10-year yield bonds have been suppressed to 3.2%, well below the 5.0% average in the last five years. Going forward, despite the Fed having carried out the most aggressive monetary policy tightening cycle since at least the 1980s, bearing in mind that inflation is still above the central bank's 2% target, it is anticipated that the Fed Funds Rate will continue to grind higher. The futures market is currently pricing a terminal rate of around 5.0% in the first half of 2023, or 100bps higher than current levels. Thus, the risk of continued fund outflows, especially from the domestic bond market, is a risk that needs to be anticipated.

Unfortunately, the hope for continued support from the trade balance, as in the last two years, may tend to be more speculative, considering that the peak of the 'commodity boom' cycle is likely to be nearing its end. In particular, amid concerns about a potential global recession in 2023 and thus the risk of weakening export demand by trading partners, this indicates that commodity export prices (and potentially the creep in volume) will weaken going forward. Indeed, several key commodity prices have already been on a downward trend. While the price of palm oil has fallen by more than 50% since its peak last March, Indonesia's benchmark coal price (HBA) has weakened by around 6.8% in November from its record high in October. In its latest projection, the World Bank anticipates coal prices to fall by 25% next year to US$240.00/metric ton (mt) and continue lower to US$212.30/mt the following year. It is also anticipated that the price of palm oil will fall by around 17% in the same period, despite the significant decline in recent months.

World Bank Commodity Price Forecast (Selected few)					
Commodity	**Unit**	**2021**	**2022F**	**2023F**	**2024F**
Coal, Australia	$/mt	138.1	320.0	240.0	212.3
Crude Oil, Brent	$/bbl	70.4	100.0	92.0	80.0
Palm oil	$/mt	1,131	1,275	1,050	1,054

Source: *World Bank (October Commodity Markets Outlook)*

On the other hand, amidst the sustained growth momentum in domestic consumption and investment, import growth is expected to be more supportive than exports. This anticipation is in line with various leading indicators such as the manufacturing PMI, which has remained in the expansion zone for the last 14 months, as well as electricity consumption by both industry and business which respectively grew 5.1% YoY and 17.3% in September.

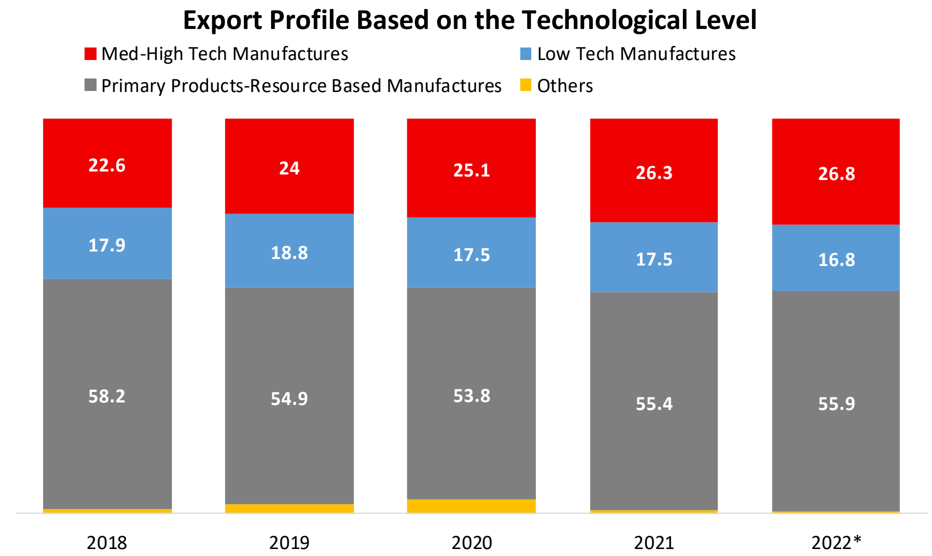
In addition, the risk of relatively high energy imports needs to be anticipated, with Brent crude price expected to trade around US$92.00/bbl next year, not far from current levels. As such, the risk that the current account balance may fall back into the deficit zone next year is rising. In fact, Fitch Solutions also expects Indonesia's current account balance to record a deficit of 0.7% of GDP in 2023. All in all, accompanied by market sentiments that are not yet entirely conducive, the risk of a continued deficit in capital and financial accounts and current account falling deficit indicates that there remains some risk of further rupiah depreciation next year.

Maximizing momentum

However, there are several reasons to remain optimistic about Indonesia's prospects. While anticipating a 2023 current account deficit of 0.7% of GDP, it is still much better than the four-year average of 2.2% prior to the Covid-19 pandemic. So, while some pressure on the exchange rate is a risk that should be anticipated, the magnitude of the pressure will most likely not be as severe as the current episode in 2022.

Furthermore, the current commodity boom episode also reminds us of another Indonesian mineral currently attracting global attention - nickel. Indonesia is the world's largest nickel producer, supplying around 38% of the total global refined nickel supply, according to consultancy CRU. Indonesia has approximately 25% of the world's total nickel reserves. Indeed, nickel's prominence has strengthened significantly amid increasing market demand for the electric vehicle (EV) industry, where nickel is a core component of the car's battery. Thus, in line with the growing urgency for the world to accelerate its transition towards net zero carbon emissions, the long-term prospects for nickel are quite significant for Indonesia - especially given the various measures to phased-out the use and production of coal. Moreover, efforts to downstream Indonesia's natural resources are very much needed, especially in the context of improving its export composition to become more complex and have higher added value, so that it becomes more sustainable.

Based on a study by Bank Indonesia, around 55% of Indonesia's export products in 2022 is still categorized as "primary products-resource-based manufactures". Nonetheless, the export profile has gradually improved, with the share of exports of medium-high tech manufactures products increasing from 22.6% in 2018 to 26.3% in 2021.



Source: *Bank Indonesia*

Focusing on nickel products, in line with the export ban on nickel ore since early 2020, the export value of nickel derivative commodities increased significantly in the same period. While the export value of nickel ore has fallen to zero since 2020, exports of ferronickel products have grown to US$8.76 billion in the January-August 2022 period versus only US$4.73bn in 2020. A similar trend also occurred in nickel and articles thereof, which reached US$3.59 billion in the first eight months of 2022 versus only US$808.4 million in 2020.

However, the Financial Times noted that Indonesia's ability to supply battery-grade nickel is still relatively limited. Most smelters in Indonesia tend to produce lower-purity nickel used in stainless steel. Until now, the downstream facilities of Mixed Hydroxide Precipitate (MHP) and Nickel Matte products for the production of electric car batteries are still in the development stage.

Still, the investment momentum in the nickel sector has improved significantly. Bloomberg reports that nickel investment, especially in the Morowali Industrial Area in Sulawesi, is anticipated to reach US$18 billion this year, up three times from US$6.7 billion in 2019. The Coordinating Minister for Investment and Maritime Affairs, Luhut Binsar Pandjaitan, stated that the acceleration of development of The Morowali Industrial Park would help Indonesia fulfil its nickel production target of 1.4 million tons as more smelters are being built. And overall, investment realization also indicated that foreign direct investment continued to accelerate by a record 63.6% YoY to US$10.8 billion in 3Q 2022. The Minister of Investment, Bahlil Lahadalia, noted that most of the FDI was into developing natural resource management, including smelters, in line with the Government's strategy to encourage downstream capabilities. Mr. Bahlil anticipates the FDI to grow above 50% YoY in 4Q 2022.

The success story of nickel downstream can potentially encourage the government to further expand the export ban on other commodities, including asphalt, tin, bauxite, and copper in the future.

Room for Improvement
However, it is paramount that a conscious sustainability objective accompanies the downstream efforts. U.S. electric carmaker Tesla still prefers to source most of its nickel from Canada and Australia, partly on its assessment that the application of Environmental, Social and Governance (ESG) values in Indonesia is still inadequate, which emphasise that there is room for improvement for all stakeholders. In assessing Indonesia's competitiveness in the EV battery supply chain, BloombergNEF ranks ESG implementation as one of the most significant homework in Indonesia, while noting that the nation's strongest competitive advantage comes from the abundance of its raw materials.

Perhaps, the success of the G20 Summit in Bali this year could be a catalyst for improving the application of ESG in Indonesia. Following the summit, Indonesia managed to secure a funding of up to US$20 billion - the largest climate funding in history - to reduce its dependence on coal. In the agreement, Indonesia is committed to limiting CO2 emissions from the energy sector and targeting net-zero carbon emissions in the energy sector by 2050.

Overall, there are high hopes for the development of the battery industry and the electric vehicle ecosystem in Indonesia. Foreign direct investment is experiencing significant acceleration, which could become an essential catalyst for more sustainable economic growth going forward. The downstream development will certainly be supportive in improving Indonesia's export composition moving higher in the value chain, which is expected to further support Indonesia's external resilience. However, in the short term, the adoption and overall demand for EVs by the domestic market will need to increase, which may be challenging especially if fuel subsidies are maintained.

Five key ESG areas to watch in 2023

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2022 was a challenging year for sustainability

2022 has seen food security and energy security challenges, along with political instability and severe climate change impacts experienced across the globe through extreme weather events e.g. monsoon flooding, heat waves and wildfires. Looking ahead to 2023, below are key ESG areas that are anticipated to further develop:

1. Transparent ESG strategies alongside greenwashing watchdogs

Attitudes towards sustainability issues are shifting towards accountability and implementation. Many businesses have been increasingly focused on decarbonisation efforts and have set aggressive net-zero targets, but it is crucial to have robust strategies to reach these set targets. Authorities are clamping down on greenwashing claims that have eroded the trust in the authenticity of ESG products in order to rebuild consumer trust in this area. Businesses would need to be transparent and truthful in their claims, with authorities expected to strengthen regulations governing greenwashing and data verification.

2. Impact of the energy crisis on the ESG agenda

Repercussions of the Russia-Ukraine conflict have led to the struggle of companies in balancing their green ambitions with energy security, potentially slowing down the pace of transition to achieve ESG goals. Countries' return to coal may be a temporary measure to bridge the energy gap, while concurrently accelerating renewable energy strategies to bolster domestic energy security. In the medium to long-term, energy diversification is expected to remain high on many countries' priority lists to accelerate decarbonisation through alternative and cleaner energy sources.

3. Greater investments in implementing low-carbon technologies

In line with decarbonisation as a priority amongst companies and countries, the implementation of low-carbon technologies such as low-carbon hydrogen and carbon capture, utilisation and storage (CCUS) are expected to continue advancing. Global investment in low-carbon hydrogen has seen exponential growth, as low-carbon technologies are experiencing strong political and commercial momentum in many countries. The development of low-carbon hydrogen plans and pilot projects have been established in many countries. For example, Singapore launched its National Hydrogen Strategy in Oct 2022, detailing the roadmap and uses for hydrogen in various sectors to prepare Singapore for a hydrogen future. S$129 million will be directed towards projects that can contribute to hydrogen import, use and storage for Singapore. Successful implementation of low-carbon technologies would require cooperation from stakeholders including companies in various sectors, as well as strong policy initiatives to develop robust global technological supply chains.

4. Carbon markets as a key lever towards decarbonisation
Active and liquid carbon markets will continue to play an important role in countries' and companies' paths towards net-zero. More companies are being proactive in achieving net-zero goals partly through carbon credits via the voluntary carbon markets.

Carbon markets require greater transparency and more stringent oversight. As cheap and low-quality carbon credits lack transparency and may not deliver the promised results, they undermine genuine efforts at climate change mitigation and divert funds away from legitimate offset projects. In a report published by a UN expert group at COP27 (the 27th annual UN meeting on climate), it highlighted that the use of cheap carbon credits to offset continued emissions is not a viable net-zero strategy. Therefore, it is important to have the necessary quality checks for high quality carbon credits to be used as an effective lever towards meeting climate goals, while concurrently pursuing emissions reduction measures.

In both compliance and voluntary carbon markets, institutional investors have a crucial role to play in promoting liquidity or directly financing and investing in carbon offset programs. These carbon credits can be used to fulfil ESG objectives, as well as hedge against climate transition risks that other asset classes in their investment portfolios may be exposed to.

5. Biodiversity – the next big thing after climate change?
There is concern that biodiversity loss can be as catastrophic as climate change, as diminishing ecosystem services can affect livelihoods, income and have direct human health impacts. With species extinction accelerating at alarming rates, the UN biodiversity conference (COP15) that is taking place in Dec 2022 aims to give biodiversity same levels of international protection as the climate. There is also an increasing realisation in the finance sector that biodiversity loss presents as much of a systemic risk as climate change, thereby requiring the inclusion of nature impact considerations in investment decisions. Some challenges faced when engaging with biodiversity issues include the complexity in measuring biodiversity impact, the lack of consistent standards, and the need for large amounts of funds and resources for nature conservation. COP15 discussions are expected to be challenging, especially when many countries are already grappling with balancing climate goals with energy security issues amidst a politically challenging environment.

Conclusion
Despite looming economic recession risks, discussions in the aforementioned ESG areas are anticipated to advance because many businesses and countries are realising the urgency to prioritise these issues. The mindsets are shifting to focus on long-term sustainability issues and not solely on short-term financial turbulence. Authorities are expected to place greater attention on renewable energy and low-carbon initiatives, as well as developing carbon markets to fulfil ESG objectives.

COP27 climate summit

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COP27, the 27th annual UN meeting on climate, took place from 6 to 20 November 2022 in Sharm el-Sheikh, Egypt, against a backdrop of climate-related disasters and political instability. The summit's targets were to shift from pledging to implementation based on the workstreams agreed upon at COP26, mobilising climate finance for developing countries, and clarifying support for loss and damage to support communities vulnerable to climate change impacts. In its final week, COP27 discussions went into overtime over the weekend with an agreement to establish a loss and damage fund for vulnerable countries to tackle climate damages, but failed to agree to a global phase down to all fossil fuels and texts pertaining to carbon markets.

The key takeaways from the summit are as follows:

1. **Rapprochement between two global largest emitters**
In the final week of COP27 meetings, the US and China resume climate talks and formal negotiations, since the suspension of bilateral talks in August because of US House Speaker Nancy Pelosi's visit to Taiwan. It offered a boost to the slow negotiations that were behind schedule in the first week. Improved relations between the two largest greenhouse gas emitters are a good sign for further progress post-COP27.

2. **Striving towards more ambitious climate goals**
Some countries have ratcheted up their climate goals this year, including Singapore, Indonesia, India and Turkey. This highlights the increased commitment from authorities to invest greater resources in climate action. To achieve the more ambitious goals, clear strategies and roadmaps should be in place to harness green opportunities.

3. **Article 6 of the Paris Agreement – Carbon markets**
Texts on Article 6.2 (guidance on international trade of carbon credits) and Article 6.4 (set-up of a centralised carbon market overseen by the UN) saw little progress in the first half of the summit due to a slew of outstanding issues. In the final week, the process of Article 6 negotiations was co-chaired by environment ministers Grace Fu of Singapore and Espen Barth Eide of Norway. Similar ministerial pairings were put together for other topics like finance (Australia and India), adaptation (Sprain and Maldives), and loss and damage (Chile and Germany).

   Countries pushed back to 2023 a decision for project types that can produce credits e.g. solar projects, avoiding deforestation, alongside most of the technical details of the texts. Article 6.2 is operational with some details ironed out, and countries have signed bilateral agreements to cooperate under this mechanism. For example, ministers from Singapore and Papua New Guinea signed a Memorandum of Understanding (MoU) on the sidelines of COP27 to build a carbon market between both countries. Other countries that Singapore has signed bilateral carbon market agreements with include Colombia, Morocco and Vietnam.

As part of efforts to operationalise Article 6, Singapore signed an MoU with the Global Carbon Council to contribute to the mobilisation of high-quality carbon credits internationally. Similar to the agreements with Verra and Gold Standard, this MoU will facilitate companies in Singapore (whose facilities are subject to the carbon tax) to exercise the option of acquiring high-quality carbon credits to offset up to 5% of taxable emissions from 2024.

Further discussions pertaining to Article 6 texts are set to drag into next year, and it may take many years before Article 6 can translate into action. One key pain point is the transparency of accounting for international carbon transfers and the implications on double-counting. While carbon markets are important, it is also important to be mindful that carbon credits are not a distraction from achieving actual emissions reduction. True emissions reduction efforts should be prioritised, with carbon credits viewed as a last-resort move for residual emissions.

4. **Climate finance for loss and damage**
   In the first week, negotiators struggled to reach a consensus on how developed countries can support developing countries to meet the cost of climate-related damages through the loss and damage fund. While developing nations demanded the establishment of a loss and damage fund, there were views that countries should leverage existing financial instruments to tackle loss and damage instead.

   Other multilateral climate adaption finance instruments saw progress. Through Indonesia's Just Energy Transition Partnership (JETP), a coalition of countries will be mobilising US$20 billion of public and private finance to support Indonesia in moving towards renewable energy sources and away from fossil fuels. This partnership is co-led by Japan, along with the United Kingdom, Germany, France, Canada, Italy, Norway and Denmark.

   Towards the end of the summit, there was finally an agreement to establish a loss and damage fund for countries most affected by climate change impacts. While this was a positive development, it remains uncertain how the agreement will be financed, which countries will contribute how much, as well as which countries will benefit from the fund. A committee intends to work on these details in the coming year, but discussions are not expected to be easy given the complexities of such an agreement.

5. **Biodiversity conservation**
The International Blue Carbon Institute, set up by Amazon and Conservation International, will be setting up in Singapore to help protect and restore coastal marine ecosystems across Southeast Asia. The next global summit on biodiversity (COP15) will be happening in December in Montreal, where campaigners are calling for a “Paris Agreement for nature”. Biodiversity issues are complex and often deprioritised, but there is an increasing realisation that biodiversity loss can be as catastrophic as climate change. There is also greater interest in debt-for-nature swap deals, with recent successful deals in the Seychelles and Barbados.

6. **Environmental costs of Russia-Ukraine conflict**
Ukraine launched a platform to evaluate the environmental damage caused by the conflict with Russia, with the aim of strengthening international collaboration pertaining to restoring the environment from warfare. Warfare and military activities produce extensive amounts of greenhouse gases, pollution and biodiversity destruction. These environmental impacts are, however, put on the back burner when there are more dire issues to address regarding human lives and health.

Conclusion

Despite the worsening climate crisis, countries are ramping up their efforts and commitments in doing their small part to mitigate climate change. The global population also just passed 8 billion people, which may make it more challenging for regions that are already burdened by scarce resources due to climate change impacts. There is increasing climate cooperation globally despite challenging circumstances, with good progress in areas such as climate finance partnerships and carbon markets. Countries need to continue working together post-COP27 with renewed drive towards a low-carbon future.

Singapore: Healthy wage growth & strong household balance sheets despite the pandemic

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With the start of the Covid pandemic in 2020, employee compensation took a hit amid the global growth recession and as many countries went into lockdown mode. The Singapore economy was not immune as GDP growth also shrunk 4.1% in 2020. With the downturn, the domestic labour market also took a dive south. Total employee compensation contracted by 0.5% compared to a year ago, but there were significant divergences by industry. For example, the worst hit in terms of employee compensation was the accommodation & food services industry (-8.4% YoY), followed by the construction industry (-7.5% YoY although compensation continued to fall in 2021 likely due to the project delays and the lockdown of worker dormitory due to the outbreak of Covid cases), the retail trade and transportation & storage industries which both fell 7.1% YoY.

The sharp slump in leisure and MICE tourist arrivals as many countries shut their borders and locked down international travel took a heavy toll on the aviation and hospitality sectors as expected. In turn, this had a dramatic impact on the hotel and property rental market as foreign tourists evaporated while many foreign workers also returned to their home countries as work disappeared. In contrast, the essential services like information & communications, finance & insurance, professional services and utilities were relatively unscathed with compensation still expanding in 2020 by 6.0%, 4.7%, 1.7% and 1.2% YoY respectively, albeit there was also a moderation in terms of pace.

With clearly uneven sectoral growth patterns persisting as the pandemic dragged into its second year, there was some compensation catch-up, but the divergence persisted. Notably, some key sectors continued to lag and had not returned to its 2019 levels yet. In 2021 alone, employee compensation levels remained depressed for the accommodation sector (-14.1% YoY which is in fact worse than 2020) while that for the transportation & storage fell by a smaller 2.8% YoY and that of the construction sector saw a modest decline of just 0.2% YoY. The resumption of public infrastructure projects and private residential property projects were off to a slow start. For the accommodation sector, the key supports likely came from demand for government quarantine facilities and also domestic tourism in the form of staycations gradually as time passed.

However, 2022 appears to herald a much stronger performance, as the heady combination of rising inflation and tight labour market conditions warranted employers to pay up to attract and retain talent amid the “Great Resignation” phenomenon. Specifically, the relaxation of Covid restriction measures and the re-opening of borders meant that the laggard industries like construction, accommodation & food services, and transportation & storage saw a jump in employee compensation, with some clocking double-digit growth even in the first three quarters of 2022. This boosted the overall employee compensation growth to 10.2% YoY in 3Q22. Although headline CPI hit 7% in July and 7.5% in both August and September 2022, it was notable that only the administrative & support services (6.7%), wholesale & retail trade (4.8%), and real estate (4.2%) saw compensation fall short of that quarter's headline inflation rate.

That said, some of the compensation adjustments could be tied to the ongoing Progressive Wage Model (PWM) for certain occupations like security guards, retail, food services, landscape and waste management sectors. As of 1 September 2022, 197,000 full-time lower wage workers are tipped to have benefited from both the new Local Qualifying salary (LQS) requirement of S$1,400 and the introduction of the PWM. If benefits accrued to workers in the cleaning, security, landscape and lift & escalator sectors, then a total of 221,000 full-time lower wage workers would benefit from the progressive wage measures, according to data from the Ministry of Manpower. Looking ahead to March 2023, more lower-wage workers will also be able to benefit from the implementation of the Food Services PWM and Occupational Progressive Wage.

More importantly, household balance sheets remain very healthy despite the prolonged pandemic period. Household net worth expanded by 7.5% YoY in 3Q22, the same pace as 2Q2022. This was despite the fact that both asset and liability growth moderated during that period – the former due to market volatility which contributed to weaker financial asset performance, while the latter was attributable to slower growth in mortgage and personal loans amid the rising interest rate environment. Nevertheless, residential property assets contributed a bigger proportion (43.9%) of total assets in 3Q2022, up from 42.3% in 1Q2022, even as the share of mortgage loans in total liabilities remained stable around 71.7% versus 71.5% in 1Q2022. Mortgage loans as a percentage of personal disposable income actually slipped from 96.3% in 1Q2022 to 85.6% in 2Q2022, whereas personal loans remained at a relatively stable 38.0% of personal disposable income. The personal savings rate, which peaked at 40% in 1Q2021, has moderated to 35% in 3Q2022, as private consumption expenditure rose with the easing of Covid restrictions and has returned to pre-Covid levels.

Compared to the pre-Covid (proxied by 4Q2019), household net worth has actually grown by 25% by 3Q2022, aided by robust employment gains and strong wage growth. This was largely on the back of healthy growth in assets (22.6%), namely financial assets (18.3%) as well as residential property asset (28.4%) during this period, which outstripped liabilities that only expanded by 7.1%. Understandably, both the public and private residential property market has been very buoyant notwithstanding the Covid pandemic. Other financial assets like cash and cash equivalents (i.e. currency & deposits) have also increased by 19.7% compared to 4Q2019, while shares & securities have also expanded by 7.0%. In contrast, HDB loan liabilities have fallen by 7.0% whereas mortgage loans to financial institutions jumped 10.1% over the same period, which could be a reflection of how much private residential prices have risen in recent years.

Going ahead, given that the global and domestic economic outlook has dimmed recently, businesses may be turning more cautious on hiring intentions and wage growth in 2023. Should elevated financial market volatility persist with the more complex economic and geopolitical landscape, then financial assets may also see more subdued growth in the interim. Moreover, if global central banks push ahead with further interest rate hikes, there could be pressure on domestic short-term interest rates to rise too and this could also potentially slow down the pace of loans growth. As it is, the latest bank loans data already shows signs of moderating momentum – September grew by 4.4% YoY (-0.5% MoM) but October eased to 2.7% YoY (-1.5% MoM). In particular, business loans to manufacturing, building & construction, general commerce, and transport, storage & communications sectors, as well as consumer loans have fallen in October 2022 compared to September, suggesting that a pullback in sentiments is already underway.

The Financial Stability Review report released in November 2022 also noted that household vulnerabilities have risen moderately over the past year as households took on more property loans, and leverage risk rose slightly and maturity risk also increased as households accumulated more short-term debt (proxied by credit card borrowings) given the pickup in discretionary spending with the economic re-opening. That said, MAS' stress tests suggest household sectors are resilient to macrofinancial shocks, as sufficient positive equity and liquidity buffers can mitigate downside risks in the event of falling asset values and rising debt servicing costs. However, there are some segments of vulnerabilities with households that are more leveraged or have higher expenditures relative to income who may face difficulties in debt servicing, and such households typically tend to be in the lower income deciles and have limited financial buffers. As of 3Q2022, the average Loan-to-Value (LTV) fell to 43%, in part due to the macroprudential measures put in place over the years.

Total remuneration (% change)

%	3Q22	2Q22	1Q22	2021	2020	2019	2018	2017	2016
Total	10.2	7.9	8.2	3.8	-0.5	3.3	4.2	3.2	3.7
Manufacturing	9.0	7.1	9.2	1.2	-1.2	3.9	2.4	1.2	-1.1
Construction	11.3	9.2	8.1	-0.2	-7.5	1.1	-2	-5.6	2.8
Utilities	7.2	3.5	3.9	5.3	1.2	0.5	3.5	3.1	1.1
Other Goods Industries	7.1	9.1	6.5	7.6	-0.3	4.1	4.5	3.2	3.0
Wholesale & Retail Trade	4.8	4.4	3.6	1.4	-2.6	2.7	3.6	2.9	4.0
- Wholesale Trade	4.7	4.5	3.9	1.2	-1.7	2.7	3.7	3.2	4.4
- Retail Trade	5.6	3.6	1.5	2.5	-7.1	2.9	2.9	1.5	2.2
Transportation & Storage	11.7	12.1	4.9	-2.8	-7.1	2.5	4.8	3.0	3.0
Accommodation & Food Services	12.8	7.4	5.0	0.6	-8.4	3.4	2.7	1.2	4.4
- Accommodation	10.2	4.3	6.4	-14.1	-13.9	4.5	6.0	2.6	3.2
- Food & Beverage Services	13.7	8.5	4.4	7.5	-5.6	2.9	1.1	0.5	4.9
Information & Communications	18.0	18.4	19.4	13.6	6	9.4	10.2	6.9	7.6
Finance & Insurance	11.0	8.1	6.8	5.1	4.7	4.9	5.5	4.8	2.4
RE/PS/A&SS	11.2	10.5	11.1	2.8	0.4	2.7	5.1	3.6	4.6
- Real Estate	4.2	6.3	6.8	-3.5	-4.7	3.4	0.9	1.4	-6.1
- Professional Services	13.8	12	12.3	4.5	1.7	2.4	5.7	2.9	6.4
- Administrative & Support Services	6.7	8.0	9.5	0.8	-0.7	3.4	5.5	6.1	5.1
Other Services Industries	9.1	2.9	7.5	7.1	0.3	2.1	4.6	5.8	6.5

RE/PS/A&SS: Real Estate, Professional Services and Administrative & Support Services.
Note: Total remuneration payable by an enterprise to an employee in return for work done, either in cash or in kind. Includes basic wage, bonuses, welfare benefits and employer's CPF contribution.
Source: *Singstat, OCBC*

Total Remuneration

$	3Q22	2Q22	1Q22	4Q21	4Q20	4Q19	4Q18
Total	55,272.7	53,813.2	59,275	56,709.5	53,195.1	53,784.4	52,590.6
Manufacturing	6,541.3	6,585.4	7,302	7,637.9	7,297.1	7,369.3	7,145.8
Construction	2,956.4	2,914.4	3,177.7	2,856.6	2,790.5	3,161.3	3,091.5
Utilities	428.5	400	493.5	446.7	415.9	410.4	421.9
Other Goods Industries	21.1	21.5	22.8	21.5	20.1	20	19.3
Wholesale & Retail Trade	7,060.2	7,063.8	7,917.7	7,839.2	7,690.5	7,917.9	7,816.9
- Wholesale Trade	5,771.2	5,950.7	6,780.9	6,612.5	6,483.2	6,622.3	6,533.3
- Retail Trade	1,289	1,113.1	1,136.8	1,226.7	1,207.3	1,295.6	1,283.6
Transportation & Storage	3,218.7	3,430.6	3,390.9	3,402.2	3,393.4	3,706.3	3,603.7
Accomm & Food Services	1,403.3	1,343.2	1,392.7	1,393.6	1,335.8	1,481.8	1,432.3
- Accommodation	359.8	345.2	376.3	401.4	407.4	509.8	487.7

- Food & Beverage Services	1,043.5	998	1,016.4	992.2	928.4	972	944.6
Information & Comms	4,594.7	4,861	4,721.5	4,291.1	3,671.2	3,490.2	3,220.2
Finance & Insurance	8,305.1	8,190.8	7,910.6	8,115.3	7,797.4	7,442.8	7,038.9
RE/PS/A&SS	8,675.2	8,449.7	9,146	8,849.4	8,304.5	8,463.7	8,232.3
- Real Estate	704.6	738.4	864.4	781	787.3	857	854.4
- Professional Services	5,861.4	5,592.1	6,059.9	5,899.6	5,497.9	5,481.6	5,321.2
- Admin & Support Services	2,109.2	2,119.2	2,221.7	2,168.8	2,019.3	2,125.1	2,056.7
Other Services Industries	12,068.2	10,552.8	13,799.6	11,856	10,478.7	10,320.7	10,567.8

RE/PS/A&SS: Real Estate, Professional Services and Administrative & Support Services.
Note: Total remuneration payable by an enterprise to an employee in return for work done, either in cash or in kind. Includes basic wage, bonuses, welfare benefits and employer's CPF contribution.
Source: *Singstat, OCBC*

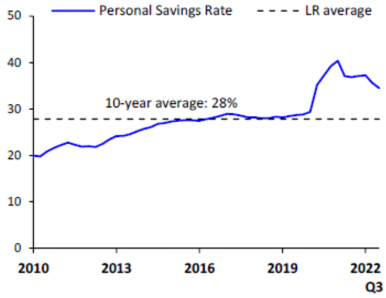
	2022		
	Q1	Q2	Q3
Growth	*Year-on-Year Percentage Change*		
Household Net Worth (= Assets – Liabilities)	**8.7**	**7.5**	**7.5**
Assets	8.3	7.2	6.9
Financial Assets	6.9	3.7	2.7
Residential Property Assets	10.4	12.1	12.8
Liabilities	6.2	5.2	3.1
Mortgage Loans	5.5	4.8	3.7
Personal Loans	8.2	6.2	1.6
Relative Share	*Per Cent*		
Assets	100.0	100.0	100.0
Financial Assets	57.7	56.7	56.1
Residential Property Assets	42.3	43.3	43.9
Liabilities	100.0	100.0	100.0
Mortgage Loans	71.5	71.6	71.7
Personal Loans	28.5	28.4	28.3
Indicator*	*Per Cent of Personal Disposable Income (PDI)*		
Household Net Worth	**914.1**	**908.8**	**-**
Assets	1,048.8	1,042.4	-
Financial Assets	605.1	591.3	-
Residential Property Assets	443.7	451.1	-
Liabilities	134.7	133.5	-
Mortgage Loans	96.3	95.6	-
Personal Loans	38.3	38.0	-

* Data on PDI for reference period Q3 2022 are not available yet. Consistent with international practices, the indicators in the section are derived using the 4-quarter moving sum of PDI.

Source: *Singstat*

Personal disposable income and savings

	Q1 2022	Q2 2022	Q3 2022
	Year-on-Year Percentage Change		
Personal Disposable Income	8.8	7.2	9.8
Personal Saving	10.1	-13.3	-3.3
Private Consumption Expenditure	8.1	18.4	17.0
Compensation of Employees	8.2	7.9	10.2
	Per Cent		
Personal Saving Rate	38.5	28.7	31.4



Source: *Singstat & MAS Financial Stability Review*

MAS assessment of household financial vulnerability (FVI)

Household sector FVI (y-o-y changes)	Q3 2021	Q3 2022
Overall Household FVI*	→	↗
Leverage risk	→	→**
Maturity risk	↘	↗

*The extent of risk is classified by band thresholds.

**While leverage risk remained within the same band in Q3 2022, the level of the indicator was slightly higher due to sustained loan growth and the increase in property prices.

y-o-y changes in FVI

Decreased significantly | Broadly unchanged | Increased significantly

Source: *MAS Financial Stability Report*

Household balance sheet (% growth)

%	2022 3Q	2022 2Q	2022 1Q	2021 4Q	2020 4Q	2019 4Q
Household Net Worth	7.5	7.5	8.7	10.3	8.8	9.4
Assets	6.9	7.2	8.3	9.9	7.3	7.7
Financial Assets	2.7	3.7	6.9	7.5	9.2	10.9
Currency & Deposits	6.4	7.1	7.2	5.1	8.7	8.1
Shares & Securities	-5	-3.7	5.2	10.3	6.6	15.8
Listed Shares	1.4	0.7	8	10.5	-0.3	5.8
Unlisted Shares	1.4	3	8.5	8	3.7	6.8
Unit Trusts & Investment Funds	-12.2	-9.4	1.9	10.8	13.8	30.9
Life Insurance	-8.9	-6.1	3	6.7	14.9	17.7
CPF	9	9.3	9.5	9.4	8.7	8.7

Pension Funds	1.1	1.2	1.3	0.8	-1.6	0.7
Residential Property Assets	12.8	12.1	10.4	13.5	4.6	3.6
Public Housing	10.4	11.6	11.8	14.5	6.1	1.3
Private Housing	14.8	12.4	9.3	12.7	3.4	5.5
Liabilities	3.1	5.2	6.2	7.4	-1.8	-1.5
Mortgage Loans	3.7	4.8	5.5	5.4	-0.6	-1.4
Financial Institutions	5	6.3	6.5	6.5	0.2	-1.6
HDB	-3.1	-3.1	0	-0.5	-4.5	-0.2
Personal Loans	1.6	6.2	8.2	12.8	-4.9	-1.6
Motor Vehicle	-3.4	-3.5	-2.2	-0.4	-6.1	1.1
Credit/Charge Cards	16	15.4	3.8	2.6	-13.5	2.7
Others	0.4	6.3	10.3	16.4	-3.2	-2.7

Source: *Singstat*

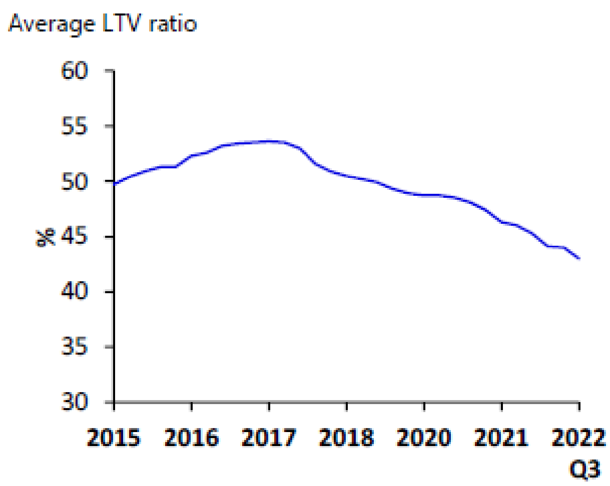
Household balance sheet ($)

Million dollars	**2022 3Q**	**2022 2Q**	**2022 1Q**	**2021 4Q**	**2020 4Q**	**2019 4Q**
Household Net Worth	2,505,854.9	2,467,625.5	2,438,682	2,402,252.4	2,177,614.8	2,001,494.4
Assets	2,869,572	2,830,155.3	2,797,966.4	2,760,440.3	2,511,011.4	2,341,009.8
Financial Assets	1,608,937.9	1,605,478.2	1,614,342	1,596,120	1,484,777.5	1,359,589.5
Currency & Deposits	569,446.5	566,634.4	562,648	543,427.2	517,148.8	475,911.7
Shares & Securities	239,723.4	244,123.3	257,441.6	263,359.4	238,819.4	224,100.9
Listed Shares	98,447.4	99,108.9	104,050.6	99,672.9	90,237.7	90,485.5
Unlisted Shares	37,454	37,832.2	38,210.4	38,367	35,514.1	34,259.5
Unit Trusts & Investment Funds	103,822	107,182.2	115,180.6	125,319.5	113,067.6	99,356
Life Insurance	242,724	247,589	258,308.6	266,875	250,075.9	217,602.1
CPF	540,205.2	530,340.5	519,172.7	505,718.8	462,130.6	425,110.2
Pension Funds	16,838.8	16,791	16,771.2	16,739.6	16,602.8	16,864.5
Residential Property Assets	1,260,634.1	1,224,677.1	1,183,624.3	1,164,320.3	1,026,233.8	981,420.3
Public Housing	553,154.9	544,123.3	526,145.1	516,878.3	451,533.2	425,696.5
Private Housing	707,479.2	680,553.8	657,479.2	647,442	574,700.6	555,723.8
Liabilities	363,717.1	362,529.8	359,284.4	358,188	333,396.6	339,515.4
Mortgage Loans	260,873.3	259,487.4	256,979.2	254,815.2	241,761.3	243,148.7
Financial Institutions	223,350.5	221,838.5	219,064.3	216,449.5	203,218.2	202,803
HDB	37,522.8	37,648.9	37,914.9	38,365.7	38,543.1	40,345.7

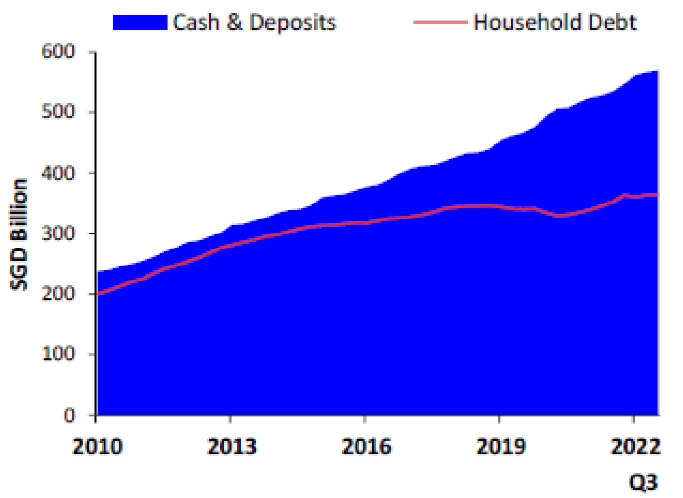
Personal Loans	102,843.8	103,042.5	102,305.2	103,372.8	91,635.3	96,366.7
Motor Vehicle	10,064.2	10,213.3	10,353.1	10,491.6	10,533.3	11,216.2
Credit/Charge Cards	12,126.8	11,611.1	10,803.1	11,205.5	10,918.1	12,626.2
Others	80,652.8	81,218.1	81,149	81,675.6	70,183.9	72,524.4

Source: *Singstat*

Average LTV ratio



Household liquid assets versus total liabilities



Source: *MAS Financial Stability Report*

SG Residential: A home and an asset

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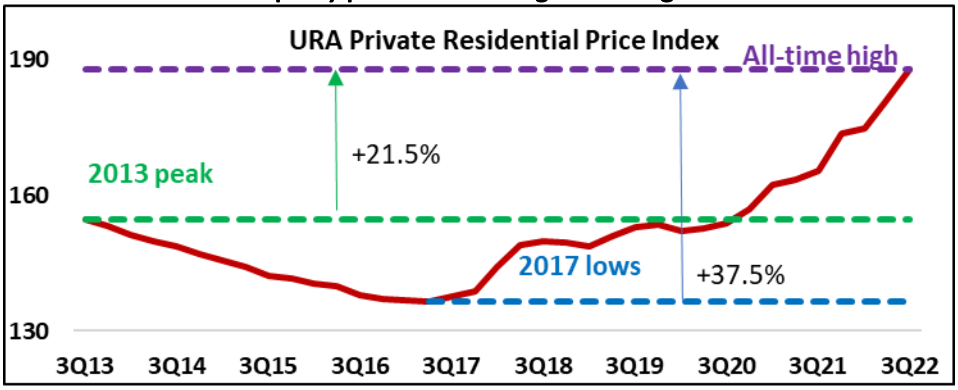
- The growth in Singapore residential prices look unstoppable, rising by 8.2% in 9M2022 while the rise in housing prices globally has slowed or reversed.
- Demand remains firm, lifted by Singaporean buyers who are increasingly wealthy and aspirational. Population has also increased, in part due to the reopening of borders while supply remains significantly constrained.
- We think the rise in prices would continue due to strong demand and insufficient supply, though we forecast price growth to slow to 3-5% in 2023 as some signs of slowdown has been observed with the surge in domestic interest rates and a weaker macroeconomic backdrop.

Unstoppable rise of SG home prices

Singapore private residential property prices rose 8.2% in 9M2022 (Full year 2021: +10.6%). Again, Singapore residential property has produced inflation-beating returns (despite elevated inflation rates). Contrast this with the drawdowns in global equities and bonds, Singapore residential property remains as 'A Stellar Asset Class', the title we used in last year's publication.

Property prices breaks high after highs



Acceleration against the headwinds: Property prices rose despite headwinds including the implementation of property cooling measures in Dec 2021, rising interest rates this year, a resumption of construction and an easing of manpower shortage. This was due to firm demand (arising from increasing affluence, aspirations, and a shift in buying behaviour driven by the pandemic) and a supply crunch with a decline in unsold units while construction costs escalated, factors we elaborated in last year's publication.

Property boom driven by strong demand

Singaporeans lift some boats faster than others: The clear outperformer since 3Q2021 are non-landed properties in the Outside Central Region, which gained +18.6% YoY and ahead of the overall URA Price Index growth of +13.6% YoY. The other sizeable gainers are Rest of Central Region (+13.5% YoY), Landed (+13.2% YoY) and HDB Resale (+11.6% YoY). We believe that Singaporean demand is a major factor accounting for the rise in property prices, with a higher proportion of Singaporean demand resulting in stronger growth in property prices. We estimate that Singaporeans dominate purchases in Outside Central Region (OCR), followed by Rest of Central Region (RCR) while Core Central Region (CCR) has the lowest proportion of demand coming from Singaporeans. In total, according to the Financial Stability Review 2022, Singapore citizens and permanent residents accounted for 96% of all transactions in 9M2022.

Strong price growth for most segments over 3Q2021 to 3Q2022

URA Price Index					HDB Price Index
Landed	CCR	RCR	OCR	Overall	Resale
+13.2%	+6.9%	+13.5%	+18.6%	+13.6%	+11.6%

Source: *HDB, URA, OCBC*

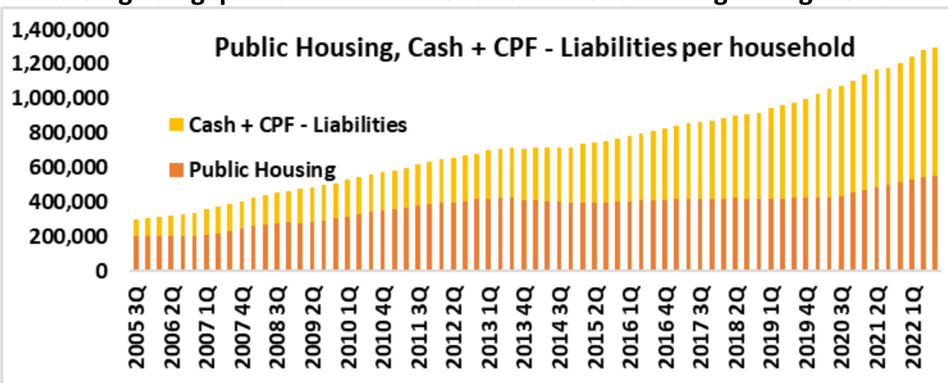
Singaporeans account for a larger share in OCR, followed by RCR and CCR

Proportion of demand	OCR	RCR	CCR
Foreigner	2%	6%	13%
Permanent Residents	9%	11%	13%
Singaporean	89%	83%	74%

Source: *URA, OCBC estimates*

The man on the street is getting richer: Singaporeans are the largest driver of demand of properties in Singapore. The presence of Singaporean is increasingly felt with an increasing ability to purchase. Counting only the assets from public housing, cash and CPF (net of all liabilities), household wealth has grown by 6.9% p.a. over the last 10 years to S$1.3 million per household as of 3Q2022. The pace of increase has picked up in recent years, growing by 10.3% YoY, partly due to the rise in HDB prices and the continued growth in cash and CPF. We believe the increasing wealth allows the average household to upgrade to private housing.

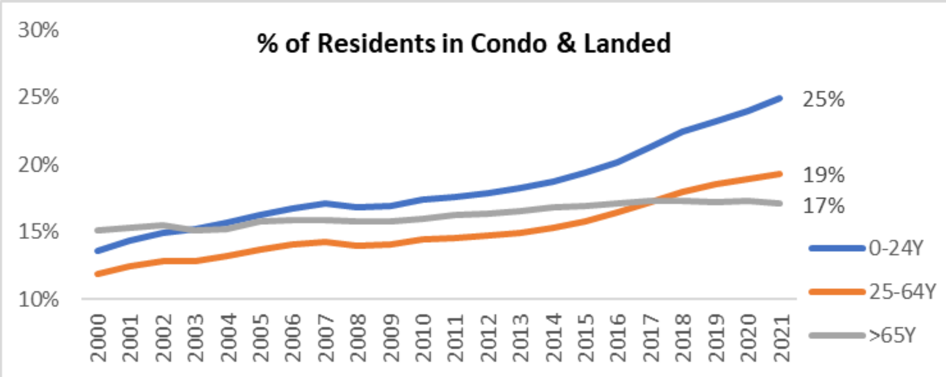
The average Singaporean is in a millionaire household and growing wealthier



Source: *Singstat, OCBC*

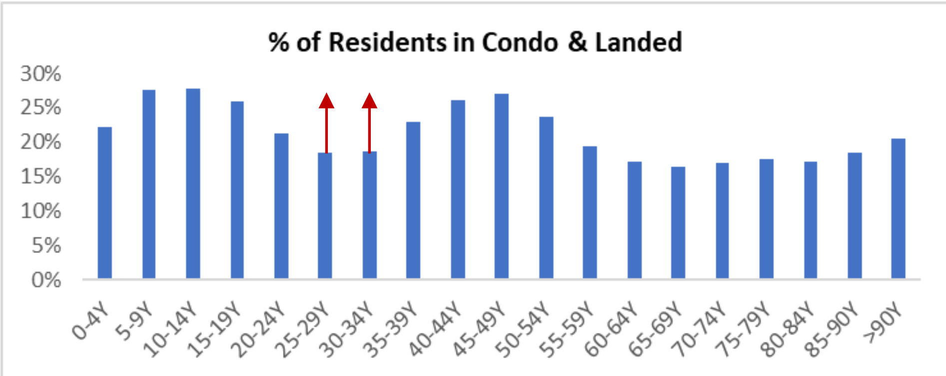
Of desires and aspirations: The proportion of residents living in condominium and landed ("private property") rose to ~21% as of 2021, with an unbroken trend of upgrading for the past 20 years at least. We think the trend to upgrade will continue. By age group, residents aged 24 year and below have the largest proportion living in private property, and this proportion is increasing at a faster pace than other age groups. Potentially, the exposure to private property could further support aspirations. Separately, age groups within 25-39 year old have a fewer proportion of residents staying in private property relative to age groups which are older. We think that residents in this age group will likely look to upgrade, and this group will likely form a significant proportion of upgraders going forward.

Younger residents are increasingly living in condo & landed



Source: *Singstat, OCBC*

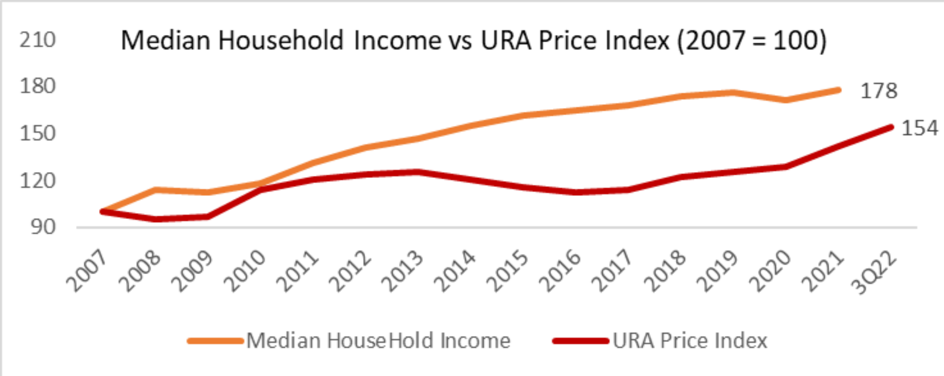
Significant pool of upgraders aged 25-39Y



Source: *Singstat, OCBC*

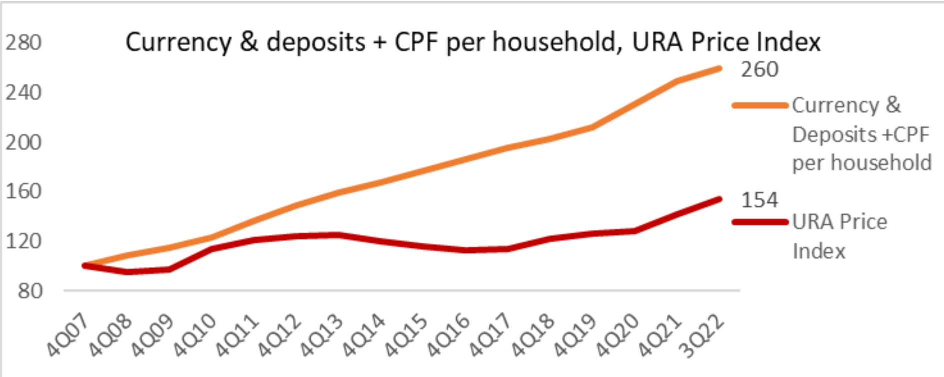
Property prices yet to catch up with wealth and income: Over 2007 to 2021, median household income has grown by 78%. This exceeds the growth of 54% in URA Price Index over 2007-3Q2022. Meanwhile, over 4Q2007 to 3Q2022, currency, deposits and CPF per household has grown by 160%, which greatly exceeds that of the growth in URA Price Index. As such, we think there is room for property prices to remain supported.

Household income has grown faster than property prices



Source: *Singstat, URA, OCBC*

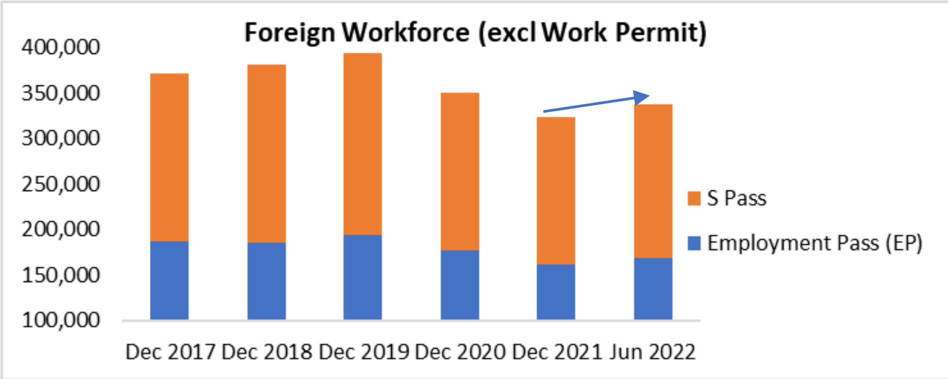
Household wealth has grown significantly faster than property prices



Source: *Singstat, URA, OCBC*

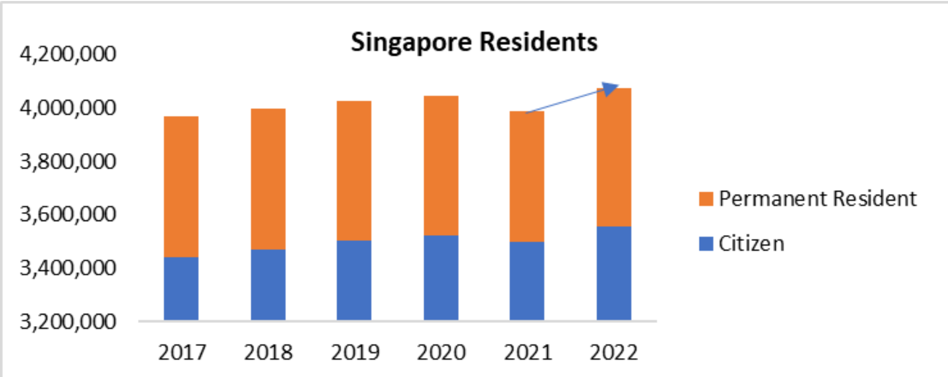
Foreigners to join the fray?: We believe the reopening of the borders have led to the influx of foreigners, with a 4.4% rise in the number of Employment Pass to 168.8k in the first half of 2022 compared to a year ago and a 4.6% rise in the number of S Pass to 169,200 as of June 2022. This growth is likely to continue as the border remains open and could accelerate with the introduction of One Pass, with total foreign workforce perhaps trending back towards the recent peak in Dec 2019 (before the onset of the pandemic). We believe the increase in foreign workforce, coupled with the 2.2% YoY increase in Singapore Residents in 2022, have resulted in an estimated YoY increase of 100,000 population in Singapore, leading to higher demand for housing.

Rebound in foreign workforce in 1H2022, with possible further increases



Source: *Singstat, OCBC*

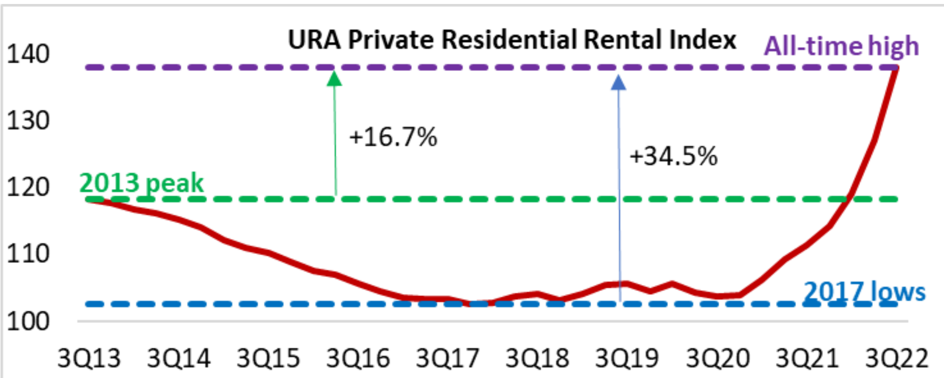
Decent recovery in number of Singapore residents in 2022



Source: *Singstat, OCBC*

Surge in rentals: According to URA Private Residential Rental Index, rentals rose 23.9% YoY, which is the fastest pace of annual increase in over 10 years. Since the 4Q2017 lows, rentals have risen by 34.5%. We think that the significant increase in rentals is attributable to the recovery in the number of Singapore residents and rebound in foreign workforce. Aside from increase in demand for rentals, the slower pace of completions since the onset of the pandemic has likely curbed supply in the rental market.

Pace of rental increase accelerated in YTD2022

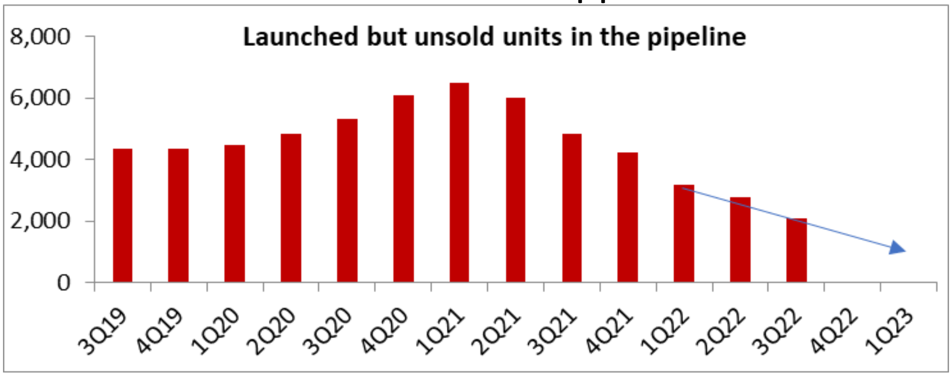


Source: *URA, OCBC*

Constrained supply

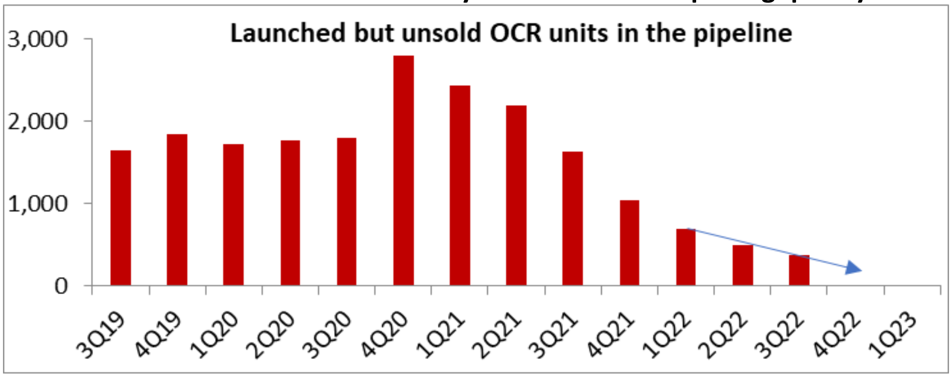
Supply squeeze: Unsold units in the pipeline fell to 15,677 as of 3Q2022. The actual supply situation is significantly more constrained, looking at the launched but unsold units in the pipeline. A mere 2,133 units have been launched but unsold as of 3Q2022, which is low in comparison to the average of 2,357 units sold per quarter in the trailing twelve months. By region, the supply shortfall is the most acute in OCR and RCR, which has 384 and 399 launched but unsold units respectively in the pipeline, while the average was 674 and 487 units sold per quarter respectively in the trailing twelve months.

Downtrend in launched but unsold units in the pipeline



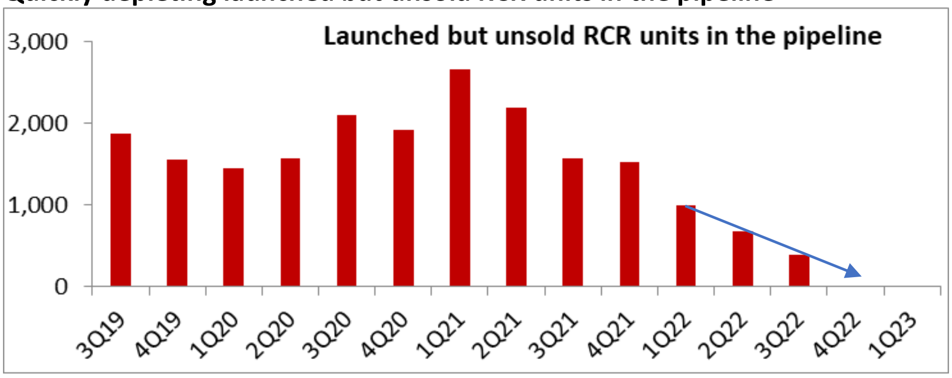
Source: *URA, OCBC*

Launched but unsold OCR units at very low levels and depleting quickly



Source: *URA, OCBC*

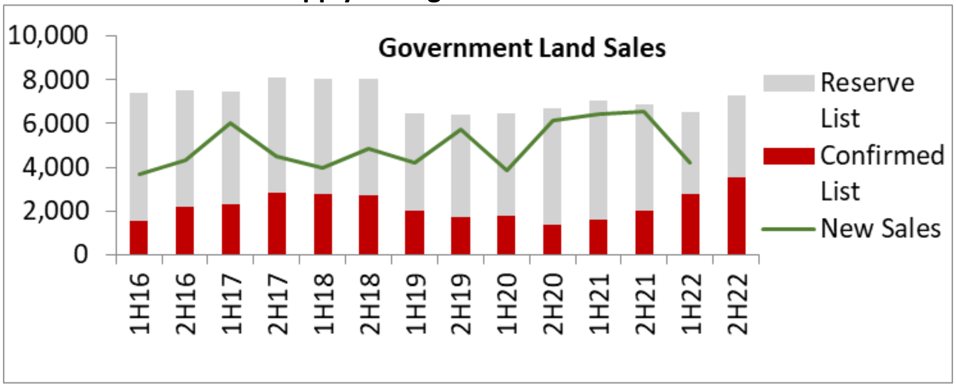
Quickly depleting launched but unsold RCR units in the pipeline



Source: *URA, OCBC*

New supply still looks insufficient: Government land sales has increased to 3,505 units for the confirmed list. The belated increase appears to be somewhat too little still, relative to 5,395 units that was sold on average each half year over 2H2021 to 1H2022 (since 2H2017, the half-yearly sale was 5,047 units). As such, supply remains insufficient though the shortfall should become less acute going forward given the recent increase in supply.

New sales still exceed supply from government land sales



Source: *URA, OCBC*

Speed humps ahead

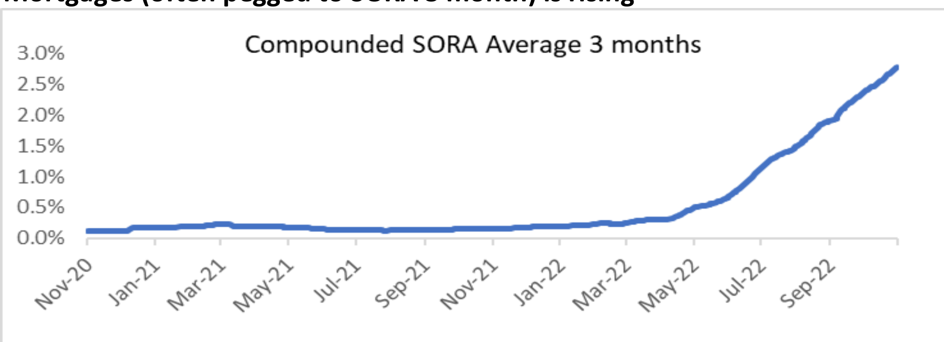
Surge in interest rates: Borrowing costs have surged, with floating rates around 3.4% and fixed rates around 4.3% at the time of writing. We estimate this would have some impact on household finances. As an illustration, for a S$1.5 million mortgage with 30-year repayment, the repayment would increase from ~S$5,000 per month to S$7,500 per month if mortgage rates increase from ~1% to ~4.3% (assuming fixed rates). While floating rates are cheaper for now, rates will most likely continue to increase given that global interest rates are still rising.

Monthly repayment sensitivity with respect to mortgage rates

SGD1.5mn mortgage with 30Y repayment						
Mortgage rates	6%	5%	4%	3%	2%	1%
Repayment per month (SGD)	8993	8052	7161	6324	5544	4825

Source: *PropertyGuru, OCBC*

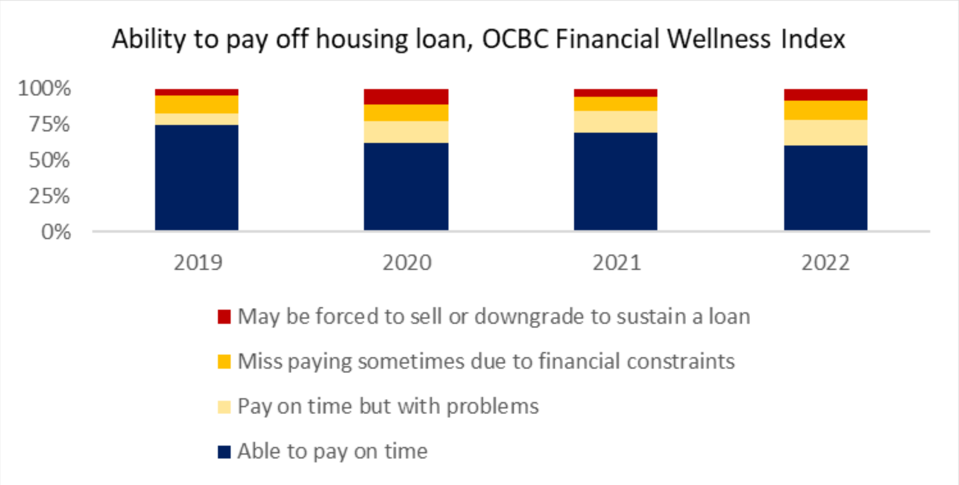
Mortgages (often pegged to SORA 3 month) is rising



Source: *Bloomberg, OCBC*

Some signs of slowdown: According to the recently released OCBC Financial Wellness Index which surveyed 2,182 working adults in Singapore in Aug 2022, 40% of Singaporeans are facing mortgage stress in 2022 (2021: 31%). This is the highest figure in 4 years, with those who may be forced to sell off or downgrade due to incapability to sustain the loan increasing to 8% in 2022 (2021: 6%). As interest rates (based on compounded SORA Average 3 months) have continued to rise sharply since August, it is likely that the proportion of Singaporeans facing mortgage stress has increased.

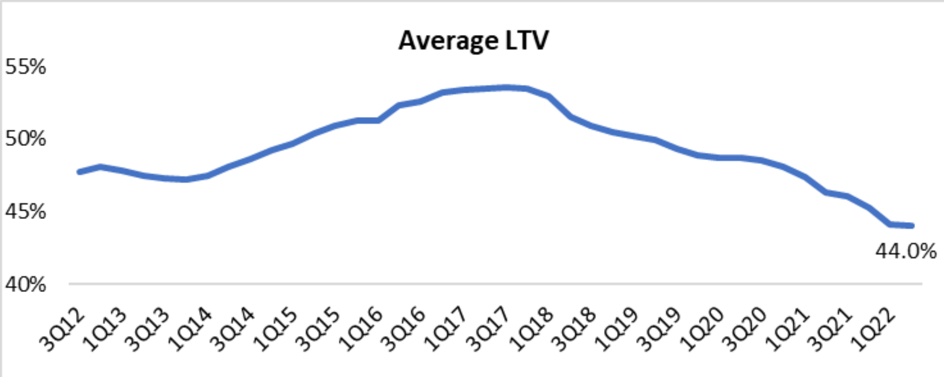
Fewer proportion are paying off housing loan on time without problems



Source: *OCBC*

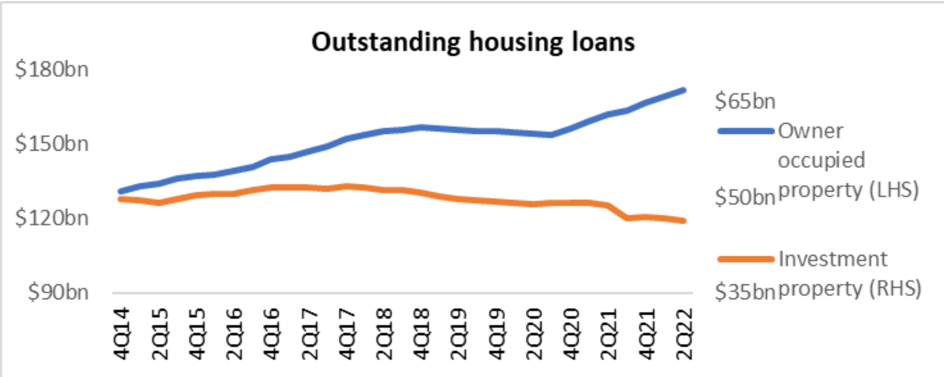
Speed humps are not speed bumps: Although rates have risen which impacts repayment amounts, we think this will be unlikely to result in declines in prices. We think that forced sales, if any, may be contained. In a reply to parliamentary question in Aug 2022, Mr Tharman Shanmugaratnam, Senior Minister and Minister in charge of MAS, revealed that the median Total Debt Servicing Ratio ("TDSR") was 43% (comfortably below TDSR regulatory limit of 55%). In the Financial Stability Review 2022, MAS commented that Singapore households "have sufficient positive equity and liquidity" and "most households should remain financially resilient even under conservative scenarios of significant income losses and a full pass-through of sharp interest rate hikes". MAS also expects non-performing mortgage loans to remain low, with housing NPL at 0.3%. Meanwhile, loan-to-value ratio ("LTV") has fallen to 44.0% (which has dipped further QoQ to 43% according to MAS Financial Stability Review 2022), which is at a multi-year low. We think that most buyers of homes are also real home-owners, as seen from the much higher proportion of loans due to owner occupied properties than that for investment property.

Loan-to-value ratio at multi-year low



Source: *MAS, OCBC*

Most loans are due to owner occupiers rather than for investment purpose

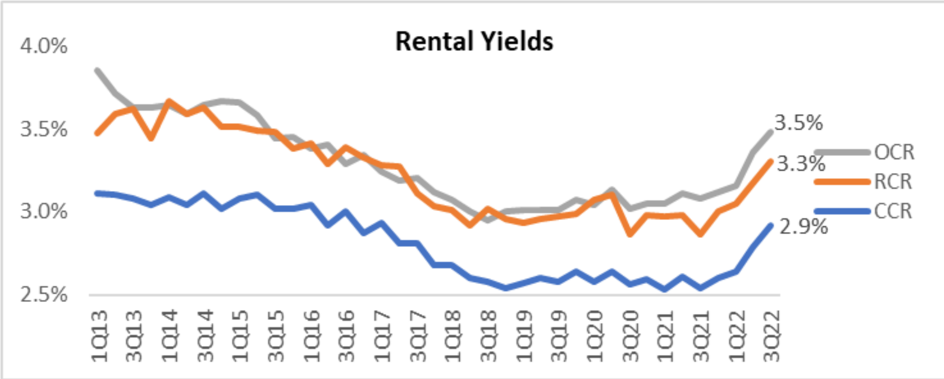


Source: *MAS, OCBC*

Would the rise in rents support property prices? For owners of existing investment properties, the rise in rents should offset the rise in mortgage payments, and hence there should be no hurry for existing investment property owners to sell. As an example, properties which were trading between 2.6% to 3.3% rental yields in 2018-2020 should see their yield on cost (cost based on prices in 2018-2020) rise to high 3% to low 4% levels, based on ~30% rise in rents. This should largely offset the rise in mortgage repayment amounts.

Negative carry for new investment property owners: While rental yields have increased significantly over the past 12 months, median rental yields of 2.9% to 3.5% as of 3Q2022 is lower than the amount needed for mortgage payment. For example, at 4% mortgage rates, 30Y repayment and 75% LTV, the amount of repayment as a proportion of property value is 4.3%, which is higher than the median rental yields. As such, it may not be appealing to buy a property for investment. That said, the decrease in demand from investment property owners, if any, should be small given that most of the property demand comes from owner occupiers.

Rents have risen faster than prices, causing yields to rise in recent quarters



Source: *URA, OCBC estimates*

Annual repayment sensitivity with respect to mortgage rates

Mortgage with 30Y repayment and 75% LTV						
Mortgage rates	6%	5%	4%	3%	2%	1%
Repayment as % of property value	5.40%	4.83%	4.30%	3.79%	3.33%	2.89%

Source: *PropertyGuru, OCBC*

Our take on the recent property cooling measure: Impact is likely muted

The recent property cooling measures announced in September 2022 is unlikely to impact the private residential property market as the measures do not place a significant emphasis on private residential property. Measures included the higher interest rate assumption when assessing a borrower's repayment ability, tighter maximum loan limits for housing loans and a 15-month wait-out period for private residential property owners downgrading to a HDB flat.

Our takes are that:

(1) Unlike previous rounds, the new measures are aimed at ensuring prudence due to rising rates and not so much due to rising housing prices. Already the measures on interest rate assumptions (with 4% p.a. floor on interest rates) are in-line with that of the market and hence the adjustment to the interest rate assumptions should not have a significant impact. That said, it also means that further rate increases could result in additional measures.

(2) Also unlike the previous rounds of measures, there is a higher focus on cooling the HDB market relative to private property. The focus is on housing affordability for HDB first timers rather than condo seekers. In the words of the government, "The Government remains committed to keep public housing inclusive, affordable and accessible to Singaporeans".

(3) The previous round of cooling measures in December 2021 did not cool the market by much and in the government's words, the change in loan-to-value limit for the property cooling measure announced in Sep 2022 "is not expected to affect first-timer and lower-income flat buyers significantly".

Conclusion: Firm demand and short supply to mitigate rates headwinds

With the growth in population coupled with the growth in wealth and aspirations of Singapore residents and households, demand should remain anchored. Meanwhile, supply remains insufficient. However, the rise in mortgage rates implies that mortgage repayments for a new property purchase has likely become costlier than rental payments. Given the steep rise in rates and the already quick pace of increase in property prices in 2021 and 2022 and a weaker macroeconomic backdrop, we think the market may invariably reassess if the continued chase at higher prices is prudent. As such, we expect the pace of private residential property price increase to slow to 3-5% in 2023.

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