NUS INVESTMENT SOCIETY

Global Macro Department – China (NEUTRAL)

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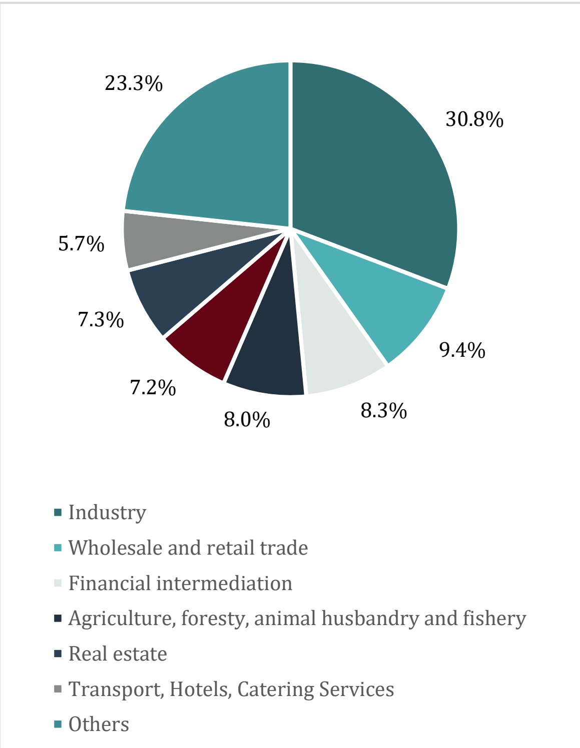
Basic Information

Real GDP (US$)	17.46T
M2 (US$)	249.97T
CPI	102.5
PPI	108.5
Stock Index	SSE Composite
Currency	CNH

Chart Info

Figure 1: China's GDP Composition by Sector in 2020



Source: Statista

The Red Dragon

GDP Contributors

- China has the world's fastest growing major economy and is well on track to overtake the U.S. to be the largest economy in the world.
- As the world's largest manufacturing economy and exporter of goods, the industrial sector generated almost 30.8% of China's GDP. Investments fuel more than 40% of China's GDP, followed by exports (Fig. 1).
- Since the introduction of Deng Xiaoping's economic reforms, we see that the Chinese Communist Party (CCP) plays a vital role in the decision of the structure of the Chinese economy. This year, China grew 4.8% YoY in Q1, beating market expectations but facing the risk of slowing down in the coming months. Earlier this year, China has set 2022 GDP growth target at 5.5% YoY. However, we expect the overall growth for the economy to be below the target, possibly going below 4%. Below are some of the key trends we have observed in the past 6 months.

Summary of Events in The Past 6 Months

Dynamic Zero-Covid Policy and Growth Concern

- Stringent zero-Covid policy continues to hamper growth in China and as such impact global supply chains.
- Unlikely to have a huge change in months leading up to the 20th National Congress of the Chinese Communist Party.

The New Geopolitics of Fragility

- Russia-Ukraine war has caused global tensions to rise and strategic alliances needed now more than ever.
- Biden's leverage in Indo-Pacific region as well as Russia-China relations- to keep a close watch.

Monetary and Fiscal Policies Amid Sluggish Growth

- PBoC cuts 5-year loan prime rate (LPR) by an unexpectedly wide 15 bps, in hopes of boosting property sector.
- USD 5.3 trillion pumped into the Chinese economy thus far, one of PBoC's main toolkits in recovering the economy.

Green Goals

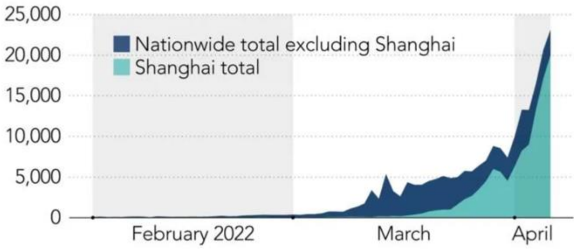
- China's climate-focused funds increased by 149% from the previous year, surpassing U.S. to be the second-largest global market.

- Ministry of Ecology and Environment postponed the release of the latest emission allowances due to issues with data fraud, which further delays China's path to net-zero.
- Greenhouse gas pollution must peak at the latest before 2025 to keep Paris Agreement's target alive and China cannot afford to delay further.

"Dynamic Zero-Covid" Policy and Growth Concern

China has seen more than 800,000 infections since the beginning of 2022, far surpassing the 92,514 cases in 2020 (Fig. 2). The Chinese government's "dynamic zero-Covid" policy, which relies on lockdowns, mass testing and quarantine in government facilities, has put pressure on the service sector, retail, production and logistics. Unlike in 2020 during the Wuhan outbreak, some of China's largest and most important cities have been locked down this year, including Shanghai, Suzhou, Shenzhen, Dongguan and the capital Beijing, which are important nodes on the industrial chain. In addition, in mid-May, China has said it will impose tight restrictions on "non-essential" overseas travel for its citizens to help contain the coronavirus. These measures are still in place despite repeated warnings from businesses and experts about the impact on fragile economic growth and employment.

Figure 2: Daily Covid-19 Cases Spikes in Mainland China



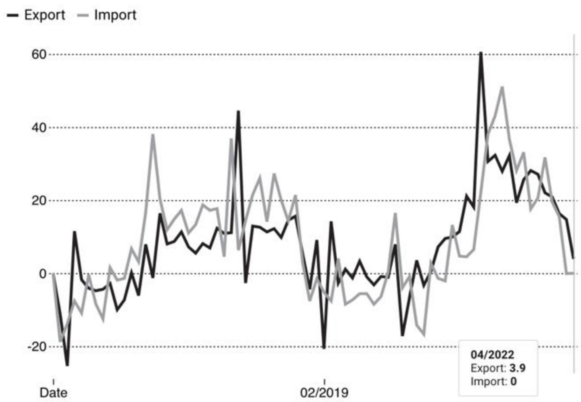
Source: National Health Commission

Why Significant?

Coronavirus-driven disruptions, including lockdowns and transport restrictions, have affected 160 million people this year in cities with a combined economic output of USD 2.68 trillion. Diminishing domestic demand, falling middle-class income and supply chain disruptions will impact global trade and contribute to global economic slowdown.

Strict zero-Covid controls contributed to sending China's export growth to its lowest rate in almost two years in April, with hopes of recovery set to face multiple headwinds from prolonged lockdowns, global inflation and geopolitical tensions. Covid lockdown has also fuelled manpower shortages and bottlenecks in the logistics sector. In April, China's trade surplus with the U.S. widened by 14.7% from a year earlier to USD 32.2 billion, up from USD 32.086 billion in March (Fig. 3). China's export momentum is likely to remain weak in the coming months, as domestic supply chain disruptions due to lockdown is set to continue into June. Furthermore, foreign demand will continue to be weakened by global inflation and volatilities due to Russia-Ukraine war and various forms of sanctions.

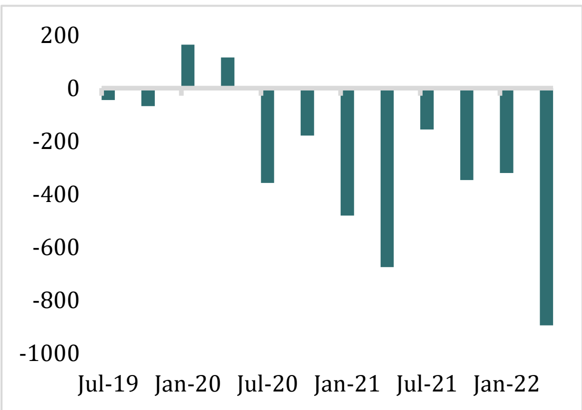
Figure 3: China's Trade Growth Monthly (in USD)



Source: China Customs

Pandemic-related restrictions and volatilities in the global markets have led to capital outflow from China (Fig. 4). Based on a survey by a major European business lobby released in early May, more European companies have been considering cutting investment in China.

Figure 4: China's Large Capital and Financial Account Deficit in Q1 of 2022

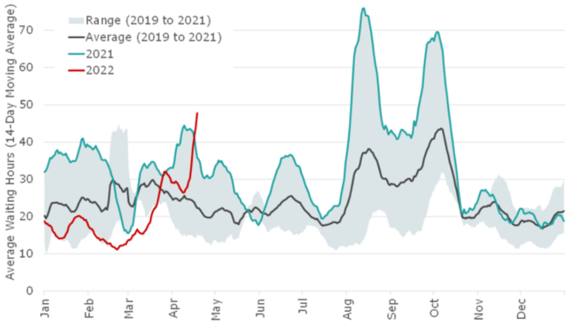


Source: State Administration of Foreign Exchange, China

We also expect China's zero-Covid policy to diminish domestic demand. Auto sales in China fell by 48.1% YoY in April and property sales in China's top 100 developers fell by 58.6% YoY. Since more cities have been shut down in May, May figure will see a further drop. Going further, worsening demand could even persist beyond the pandemic as middle class have been suffering from income drop. Personal income tax receipt in March dropped by 51.3%. Income loss will dampen demand for non-essential goods even when zero-Covid policy is over.

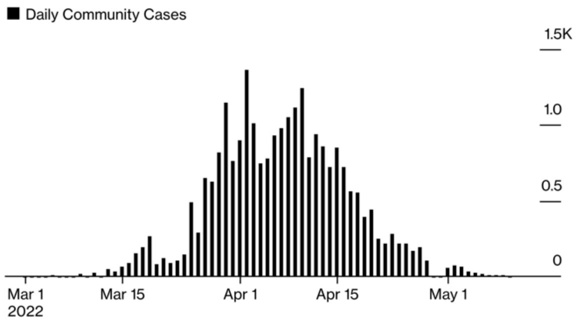
Lower demand in China will inevitably impact global trade. China has been a critical driver for multinational companies in keeping production costs low and Chinese middle class has been an important market. Thus, 2022Q2 is likely to be tough for global companies. As we also expect an import drop due to low demand, this will have a lasting

Figure 5: Average Waiting Time for Containers at the Port of Shanghai



Source: VesselsValue

Figure 6: Falling Community Spread in Shanghai



Source: Shanghai Municipal Health Commission

Figure 7: Ukraine Crisis Could Heighten Asia's Risks

Risk Scenario	Probability	Impact
Security conflict across Taiwan Strait	Moderate	Very high
China moves against Taiwan's holdings in the South China Sea	Moderate	High
North Korea resumes development of nuclear weapons	Low	Very high
India-China tensions escalate to a military conflict	Low	Very high

Source: EIU Risk Briefing

impact for commodity producers, disproportionately impacting emerging markets and Europe.

Global supply chain has also been disruption both upstream and downstream due to lockdowns in China. This has significantly increased operational risks for companies. According to an updated graph supplied to The Loadstar by VesselsValue, Shanghai import container wait time had spiked (Fig. 5). Based on shipping analytics company Windward, 20% of the world's 9,000+ active container ships are sitting in traffic jams outside congested ports and close to 30% of that backlog alone is in China. When the backlog clears, a surge in container exported to Europe and U.S. will induce disruption at European and U.S. ports in the following months.

<u>What's Next?</u>

China is unlikely to significantly ease its Covid-19 restrictions before the 20th Party Congress in late 2022. Although recent easing of Covid-19 outbreak in Shanghai has given investors' hopes on China equities as CSI 300 Index rebounded on May 11, volatility remains in the market (Fig. 6). The Omicron variant could easily be recurring, even if case number is controlled to almost zero. Therefore, China has to severely restrict mobility over the longer term. Proposed system of PCR testing kiosks further supports this. Regular operational disruption throughout 2022 as different localities face outbreaks will still be in place, leading to global supply chain disruption throughout the year.

We believe that the Chinese government is aware of the relative ineffectiveness of the existing domestic vaccines. Yet, China's current healthcare system is unable to survive a full-blown health crisis so is working towards mRNA vaccine solutions. They are unlikely to distribute or announce the next step before the 20th National Congress of the Party in late 2022. We believe that the government is not going towards the strategy of "living with Omicron" anytime soon and mRNA is necessary for them to fully return to normal.

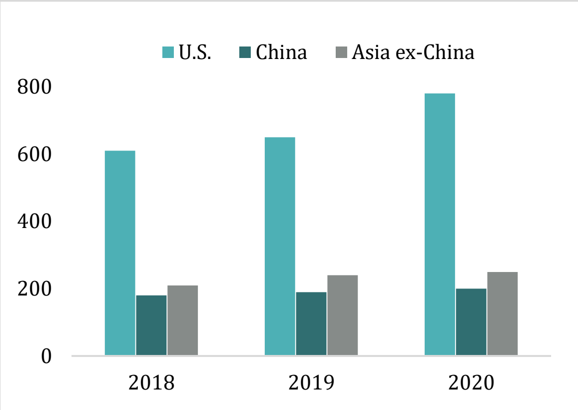
The New Geopolitics of Fragility

Beyond the impact on Europe, we discuss how the ongoing Russo-Ukrainian war continues to add another layer to an increasingly complicated geopolitical environment in Asia. In Asia, we definitely see a bifurcated geopolitical environment (Fig. 7) and bilateral relations since the crisis has further widened political and economic divergence between the two global powerhouses, U.S. and China.

<u>Biden's Strategy: All Butter, No Trade</u>

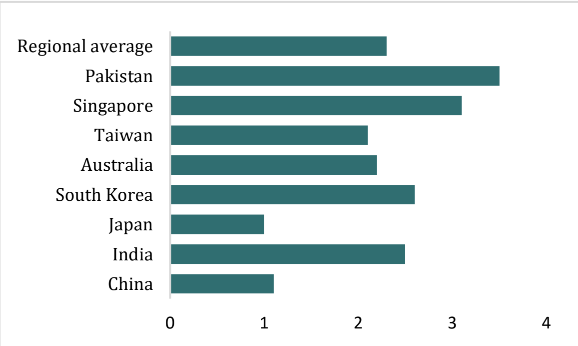
The Indo-Pacific region will continue to remain central to U.S' long-term security and economic strategy. Biden, like presidents before him, entered the White House with clear intentions of reorienting U.S. foreign policy toward Asia. Just two weeks before Russia invaded Ukraine, the Biden administration released its Indo-Pacific economic framework (IPEF), which outlines Biden's vision to more firmly anchor the U.S in the region by strengthening ties through alliances, connectivity and security. In short, we think that the strategy's ultimate goal is to counter China. However, in the near-term, we see that U.S will be less likely to deliver its Indo-Pacific strategy due to the ongoing conflict. This does not symbolise a reduction in their

Figure 8: U.S. Defence Spending Growing Faster Than China (in Billion USD)



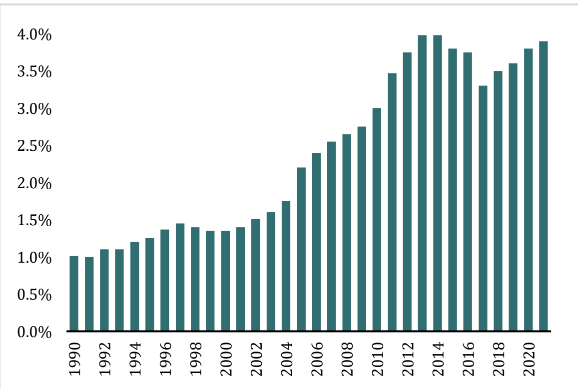
Source: IISS, EIU

Figure 9: Defence Spending As a % of GDP, 2020



Source: IISS, EIU

Figure 10: China is Russia's Biggest Trading Partner



Source: National Bureau of Statistics

diplomatic footprint in Asia, but rather the war has probably made the administration rethink their steps since they may not have the bandwidth to handle crises in both Europe and Asia simultaneously. With U.S. viewing China as the main threat to its global primacy, we see the juxtaposition of these events to be a dilemma but also a potential hallmark of his foreign policy residency.

With a more distracted U.S. in the near term, this provides for more potential opportunities for China in its own neighbourhood. Militarily, U.S. defence spending is higher and growing faster than that of China (Fig. 8). Russia's invasion of their small independent neighbour may re-emphasise Chinese intentions in Asia. In the event China decides to align decisively with Russia, many may seek stronger ties with the U.S. to counter China. Already we see, Australia pushing for access to U.S. missile and nuclear technology, and U.S. allies such as Japan have most space to push for higher defence budgets (Fig. 9). Moreover, with more countries such as Sweden and Finland applying to join NATO, this increased solidarity in response to the crisis could mean that European powers will be more involved in Asia in time to come. Thus, benefitting the IPEF while posing even more challenges for China's supremacy in the long-run.

However, economically, the absence of U.S. in the Indo-Pacific region will make way for China to comfortably shape trade and investment rules of the region, through its support of mega-regional trade deals, as seen from the 11-nation deal they just joined last year. Currently, we still await an appealing economic strategy that will help to bolster U.S' leverage in Asia and ensure that countries are not too economically reliant on China. Till then, U.S. risks ending up with a lopsided approach, heavy on military presence but light on economic engagement. The mixed strategic benefits of the ongoing conflict explains a rather difficult position for China so far.

<u>Russia and China: 'No Limits'</u>

Today, the superpower rivalry is between U.S. and China. During the Cold War era, it was with Russia. Political affinities, economic complementarities and foreign policy convergences bring about the closer alignment between Russia and China. As mentioned in the joint statement from Putin-Xi summit earlier this year, Russia and China proclaimed a 'no limits' partnership to stand up to the U.S.

China offers an important alternative market for Russia 's energy and raw materials. With China already seeking to secure more Russian oil for its reserves, this would also mean skewing an already asymmetrical relationship as it makes Russia even more dependent on China (Fig. 10). While tilting towards Russia, we think that Beijing is trying to tread a cautious line here. As the world continues to focus on this iconic duo, it is crucial for China to carefully calibrate an image which isn't overly accommodating since China's ambitions very much depends on a relatively open world economy in trade and technology.

<u>Learn and Prepare?</u>

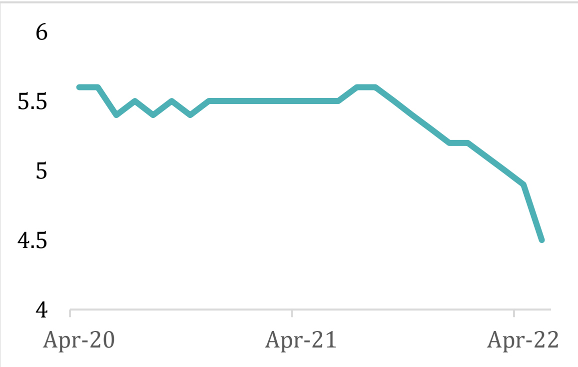
In an unlikely scenario where U.S. becomes militarily stretched, it could potentially affect its ability to honour defence commitments in the region. For China, this would suggest lower downside risk associated with an effort to annex Taiwan. If anything, we think that Russia's invasion of Ukraine makes the probability of China taking over Taiwan more rather than less. Given Russia's invasion of Ukraine, this

Figure 11: Huge Selloff in U.S. Stock Market Due to Russo-Ukrainian War

Global Event	Selloff in U.S. Stock Market, Peak to Trough
Russia invades Ukraine, Feb 2022	-15.0%
Al-Qaeda attacks, Sep 2001	-11.6%
North Korea invades South Korea, June 1950	-17.1%
Germany attacks France, May 1940	-25.8%

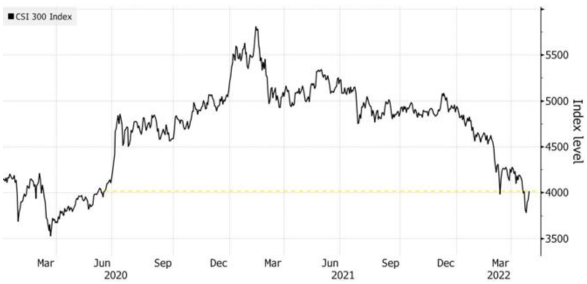
Source: Deutsche Bank

Figure 12: China's 2022 Real GDP Forecasts Getting Gloomier



Source: Bloomberg survey

Figure 13: CSI 300 Hovering Near Mid-2020 Low Despite Policy Vows



Source: Bloomberg

has focused attention on the risk of a Chinese attempt to take Taiwan. In addition, the severe impact of sweeping sanctions, the strength and speed of the Western response and Russia's resulting economic downturn due to forced decoupling from the global economy as a result of the war will give Beijing much to think about (Fig. 11). These actions collectively have provided China with a more than enough illustrative example from which it can learn and prepare.

Overall, the Russo-Ukrainian war will mean higher defence spending for most countries which will reduce the share of government budgets available for other social and economic development needs. We will expect to see strategic alliances grow in importance, especially U.S. allies such as Australia, Japan and South Korea to step up their actions. Prior to Russia's invasion, tensions between China and the U.S. have already been bubbling and recent events will cause tensions to bubble further. This will in turn affect the unity of ASEAN region and on a global scale, continue to create strains and even more challenges for international firms. Though we all need a crystal ball to figure out what are China's next steps moving forward, we believe that the Yuan will continue to be attractive for many.

Monetary and Fiscal Policies Amid Sluggish Growth

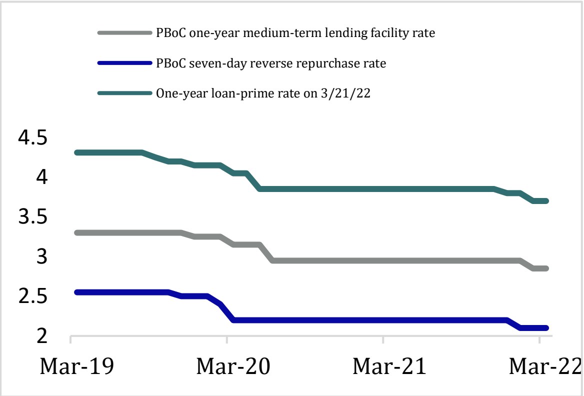
In late April, the International Monetary Fund lowered China's 2022 growth forecast from 4.8% to 4.4% (Fig. 12). It would be tough for China to reach its GDP growth target of 5.5% which was set earlier this year in the Government 2022 Work Plan. More policies are required to support the economy. Recently, the government has signalled strong will to adopt further policy support to boost economic performance before the 20th Party Congress later this year.

How Bad Is The Situation?

China's onshore stock market has been tanking due to dim economic outlook. CSI 300 Index has been down almost 20% (Fig. 13), which makes it the world's worst performing major national equity benchmark index. While onshore stocks rebounded after April 29 Politburo meeting which emphasized balance between growth and covid control, the momentum might falter given the authority's hard-line tone to defend zero-Covid policy. Policy measures to shore up onshore stock market include encouraging more technology platform companies to go public either domestically or overseas, increasing the participation of institutional investors and expanding the investible universe of the exchange link with Hong Kong. However, measures and vows of market stability from authorities since mid-March have only brought marginal gains.

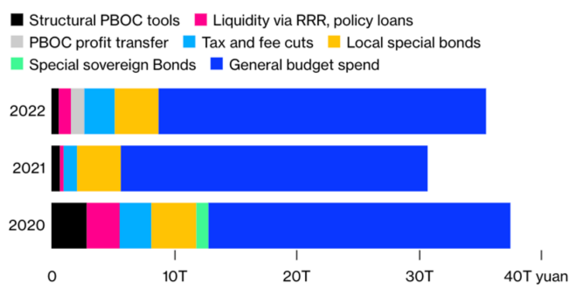
Additionally, market expects multiple interest rate hikes by the U.S. Federal Reserve while People's Bank of China (PBoC) has been on a dovish stance (Fig. 14). Monetary policy divergence with the U.S. has narrowed the interest rate spread, and China-U.S. tension continues over the audit of overseas listed Chinese companies. This triggered capital outflows from China, weighing on the China Yuan exchange rate and foreign exchange market. In late April, China's central bank set the Yuan midpoint at 6.4098 per USD, a 1% drop since the start of April, showing that they might have responded to pressures from U.S. rate hikes.

Figure 14: China's Central Bank Easing Cycle



Source: PBoC

Figure 15: China's Economic Stimuli Breakdown



Source: PBoC, Ministry of Finance, Bloomberg estimates

Another economic headwind is the property sector contraction. As a continuation of property sector crisis in 2021, this year property sector is also hit by zero-Covid lockdowns. In April, the top 100 Chinese developers saw new home sales volume and value growth drop 61.2% and 58.6% year-on-year, respectively, according to China Real Estate Information Corp. New home sales volume in 30 major cities monitored by Wind also deteriorated, plummeting 53.1% in April from 46.9% in March, according to Wind data on 30 major cities. The contraction could have spill over effects to the national economy.

Fiscal Policies

China has pumped USD 5.3 trillion (around one third of the nation's economy) into the economy, according to Bloomberg's calculation based on policies announced so far. This figure is more than 2021's stimulus but less than 2020 when the pandemic first hit. Fiscal spending has been the main tool with monetary policies being the supportive tool (Fig. 15).

Specifically, Chinese President Xi has called for an infrastructure campaign in April to accommodate growth. Mr Xi told local authorities to bolster the construction and efficiency of infrastructure networks in transport, energy, and water conservation. The campaign also includes massive wind and solar power plants in the nation's deserts, with a first batch of renewable-energy projects in the interior set to add 97 gigawatts of generation capacity.

Infrastructure growth could alleviate the economic slowdown. However, we do not expect it to be an efficient fix for the economy in the short run. Under the current zero-Covid policies, travel bans, pause of industrial activities and manpower shortage could render infrastructure investment ineffective. In addition, major spending push could trigger government debt worries.

Overall, Beijing has announced a package of extra government spending and tax cuts worth around CNY 4.5 trillion. It is also allowing local governments to increase off-balance-sheet debt to fund infrastructure. Moreover, the authority is encouraging science and technology-related investments through full tax deductions on specified R&D investment.

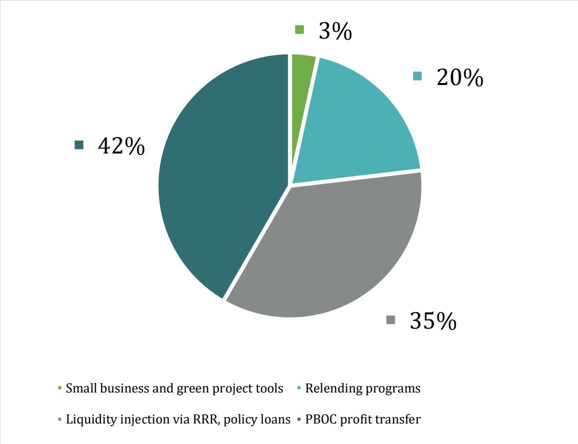
All these stimuli seem to contradict zero-Covid policies which restrict mobility, manpower and productivity. Although China might increase commodity demand in the next half of 2022 which fuels import, this is unlikely to help the economy to a large extent. In our opinion, the most probable scenario is that pros of stimulus and cons lockdown cancel each other out.

Monetary Policies

There has not been much easing in 2022 so far. PBoC has only cut policy interest rates once in January by 10 bps. It has also reduced the reserve requirement ratio by 25 bps (lower than expected) in April, injecting around 530 billion CNY of long-term liquidity into the economy. Monetary stimulus in 2022 is mostly from profit transfers and liquidity injections (Fig. 16).

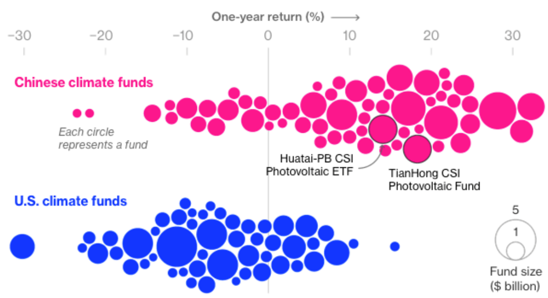
On May 20, PBoC surprisingly cut the benchmark reference rate for mortgages (5-year Loan Prime Rate) by an unexpectedly wide margin, being its second reduction this year as Beijing seeks to revive the ailing

Figure 16: China's Monetary Support Breakdown



Source: PBoC, Bloomberg estimates

Figure 17: Chinese Climate Funds Perform Better Than U.S.



Source: Morningstar Direct

housing sector to prop up the economy. This took place soon after the announcement to lower bank funding costs and floor on mortgage rates for first-time buyers. Together, the policies have given hope for real economic support and growth as lower mortgage rates and lower down payment requirements may boost housing demand. This can relieve a major tail risk for the economy, housing market contraction, hence improving CNH outlook.

However, given the government's predominant stance against housing speculation, we doubt whether the property-friendly policy will have major nationwide impacts. In addition, the effectiveness is also limited by lockdowns and impact on consumer mortgage sentiment is smaller. We believe that easing of covid restrictions and customer sentiment recovery are critical which would have a huge impact on demand.

<u>More Policies on the Way?</u>

As most of the stimulus was announced at the National People's Congress in March before major lockdowns, more measures as needed may be announced later in the year. We believe that China is highly likely in need of additional support, as lockdowns continue to weigh on growth. PBoC should be wary of diverging too far from other major economies' hawkish policies which will depreciate CNH further. On the fiscal side, the government will be cautious of soaring debt.

As 1-year Loan Prime Rate was not reduced, which suggests that PBoC might aim for targeted easing policies, we do not expect huge stimulus of the scale seen back in 2020. While asymmetrical rate cuts can help drive property sector yet maintain the prudent policy stance, we believe that more broad-based easing is required to fuel domestic demand.

Green Goals

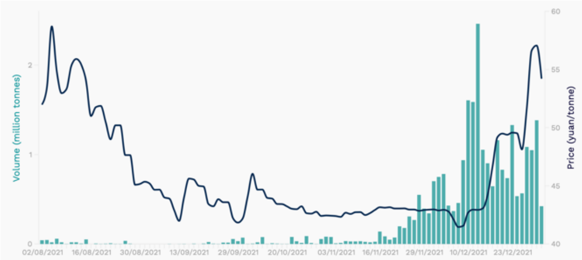
Climate change is reshaping more than just the environment, but more so the way the society will function for the next millennium. It is clear that achieving net zero will come at a great cost, BofA Global Research Team estimates that an estimated USD 150 trillion would be required to transition to a net zero economy by 2050. In China, Xi put his weight behind China's net-zero push and officially approved carbon neutrality and net-zero targets in 2021.

<u>East vs West</u>

According to data from Morningstar, China's climate-focused funds grew to USD 47 billion in 2021, increasing by 149% from the previous year, surpassing U.S. to be the second-largest global market. This jump was largely driven by policies in the East, as compared to climate protection awareness in the West yet Chinese climate funds still performed better on average in the 12 months to April 2022 (Fig. 17).

According to the official Weibo of the Ministry of Ecology and Environment, Liu Youbin spokesman of the ministry mentioned that there was 'zero tolerance' for fraudulent carbon emission data in March earlier this year. Ever since China's carbon market launched online trading in July last year, overall operation has been relatively stable and environmental data quality and credibility is the 'lifeline' of environmental management. As such, China will crack down on illegal crimes of data fraud if required.

Figure 18: Thinning Carbon Trading Activity in China



Source: China National Carbon Trading Exchange

<u>Another Roadblock</u>

With carbon prices already flattening and thin trading in the carbon market (Fig. 18), China's Ministry of Ecology and Environment postponed the release of their latest emission allowances due to issues with data fraud. In February this year, the Ministry found out that 18 of 19 randomly selected power companies had submitted controversial data. Later in March, four consulting firms were publicly reprimanded for falsification or negligence in data verification for power companies. This data problem alongside lack of policing power by regulators further threatens and prolongs the time it will take for carbon pricing to help reduce emissions in China.

Europe took more than a decade before prices increased high enough to prompt utilities to reduce emissions. However, China, who is currently the world's largest polluter, does not seem to have the luxury of time as scientists warned that greenhouse gas pollution must peak at the latest before 2025 to keep Paris Agreement's target alive. In addition, there is a vast gap in knowledge between major cities like Beijing and Shanghai and industrial provinces like Inner Mongolia and Shanxi, on basics of climate science and accounting for emissions.

With China yet to create a sustainable regulatory structure for the market, green problems would still be at bay. Concrete guidelines and regulations for building effective monitoring, reporting and verification systems must be introduced to avoid any more loopholes and manipulation of data.

<u>Conflicting Commodities</u>

Even as domestic demand has slowed due to lockdowns and restrictions on industrial activity, China has been buying more energy from Russia, with oil, gas and coal purchases surging to 75% in April to over USD 6 billion. Most recently, as mentioned above, China has also been in talks to replenish its crude reserves with Russian oil, symbolising an even stronger relationship between the two as Russia's relationship with the West sours due to invasion of Ukraine.

However, we are well aware that geopolitics would play a huge role in the transition to a net zero economy. China's emphasis on EVs yet continual large oil imports, especially from its warm neighbour Russia may be a tricky feat in their promise to a greener economy. In addition, as global superpowers vie for the top spot in climate action, this could also potentially threaten the free movement of goods and capital, as well as cause resource scarcity, resulting in even more fragile global ties under the changing world order.

Figure 19: Short USDCNH

Source: Tradingview

Trade Idea: Short USDCNH

Narrative

Recent earning results release from major U.S. retailers raised concerns about a recession, decreasing probability of rapid rate hikes from the Fed. Just last week, PBoC announced that it will cut the five-year loan prime rate by 15 bp to 4.45%, which was aimed at boosting the property sector since they kept the one-year rate unchanged at 3.7%. This instilled some confidence in Chinese asset markets and sent the pair 0.59% lower to 6.6800. China will likely prevent a large-scale synchronised lockdown across the country and we expect further outbreaks to face the same strict but short lockdown as Shenzhen, rather than Shanghai's unsuccessful attempt at phased lockdowns. China's flexible labour market and domestic supply chain could also help mitigate the impact on production if disruptions are temporary. However, the longer local lockdowns last, the harder it will be for factories to make up losses and ultimately fiscal measures would play a bigger role in recovering the economy.

Catalysts

Yet, risk continues to heighten for this pair. Apart from divergence in monetary policies, considering China's current strict lockdown situation, the growth outlook for China remains a concern for global trade. In addition, with global macro slowdown and contrasting monetary policies between China and her other major economies, we recognise that the short term volatility for CNH remains high. As such, we do not see the pair heading straight back to 6.5000. However, Yuan's exchange rate against a basket of currencies remains relatively stable.

Technicals

After topping the 6.8000 region, we see that the upward momentum for the pair is beginning to wane. The pair broke its strong support of 6.7650, which indicated that the month-long USD strength has run its course. The chart shows a classic bearish head and shoulders has formed in the short term (Fig. 19). We will short this pair and enter once it breaks below the neckline of 6.7400. The MACD line has also crossed well below its signal line, a bearish indicator. Already, the pair has drifted well below the 6.7000 region and we look out for the next resistance at 6.6500.

Trade

Overall, with upside exhaustion of the pair, we remain short on the pair and suggest a take profit of 6.6589 with a risk reward of 1.5.

Entry: 6.7407
Take Profit: 6.6589
Stop Loss: 6.7949
Risk Reward Ratio: 1.5

Global Macro Department – Hong Kong (UNDERWEIGHT) Date: 19th May 2022

Analyst

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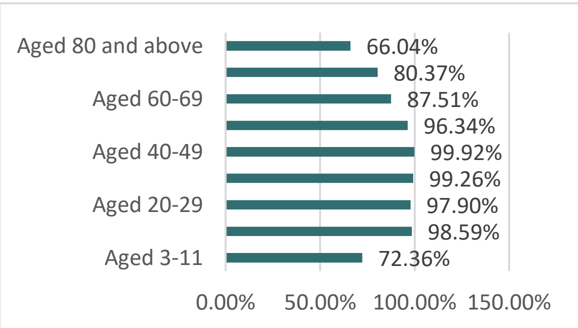
Basic Information

Real GDP (US$)	347B
Real GDP Growth Rate (Q1)	-4%
CPI (Mar)	1.7%
HKMA Base Rate (Mar)	0.75%
Con. Confidence (Mar)	70.6
Unemployment Rate	5%

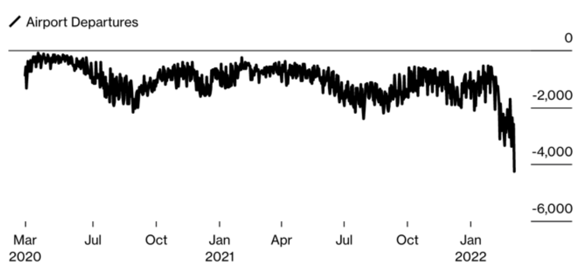
Chart info

Figure 1: Breakdown of Vaccination Rates in Hong Kong



Source: Government of the Hong Kong Special Administrative Region

Figure 2: Number of people leaving Hong Kong since March 2020



Source: Hong Kong Immigration Department, Bloomberg

Overview of Hong Kong

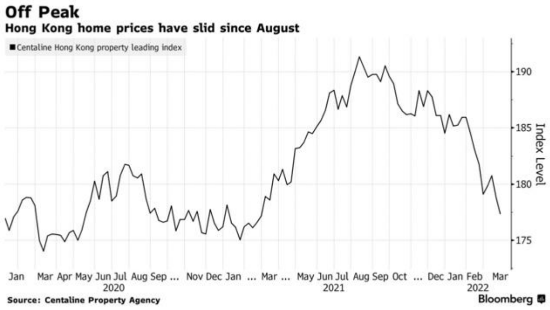
Often heralded as one of the most competitive locations for operating a business, Hong Kong boasts a Real GDP of USD 347 Billion. Financial services, tourism, trading and logistics and professional services have been identified as the Four Key Industries of its economy. It is one of the most service-oriented economies, accounting for 93.5% of its GDP (2020). Particularly, it is seen as the prime location seeking to sell into the mainland or in the broader region and is a global offshore RMB business hub.

However, in recent times, fears over the slowdown brought about from the recent surge in Covid-19 cases, and a harder stance on security have started to concern investors.

Summary Of Events In The Past 6 Months

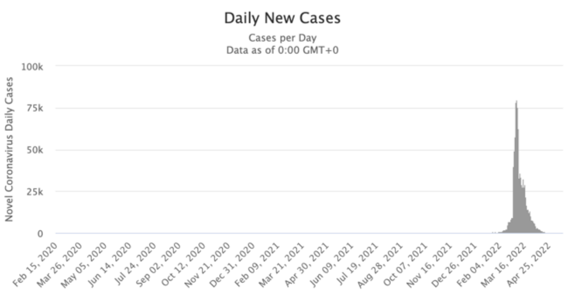
- Carrie Lam has stepped down as Hong Kong's leader, and John Lee has been elected as the new Chief Executive-designate of Hong Kong. Lee's election is largely regarded as a shift towards greater law enforcement over financial recovery in Hong Kong.
- Hong Kong suffered a surge of cases early 2022, and had recorded 5,600 deaths in Q1 2022 alone, far above that of 200 it recorded in 2020-2021.
- Following the sudden outbreak, authorities had implemented strict restrictions on mobility and mass testing schemes. Authorities have since eased measures to allow for dining-in and an easing of mask requirements for indoor exercise.
- Officials, adamant on increasing its vaccination rates (Fig. 1), have required residents to take 3 jabs before May 31 2022 to qualify for Hong Kong's Vaccine Pass. 49.3% of the population have complied.
- Around 130,000 people, including expats and citizens alike, have left Hong Kong since Feb 2022. This comes as Covid-19 restrictions have impeded the livelihoods and work-lives of many. (Fig. 2)
- Hong Kong property prices and non-residential rental fees fall amidst weak demand from Covid-19-related restrictions, with the Hong Kong Housing Index last recording 176.29 in March 2022 (Fig. 3)
- HKMA intervenes to defend the USD peg in May 2022 for the first time since 2019. It had bought around HKD 1.6 Billion to prop up its currency after falling to the lower limit of HKD 7.85/USD.

Figure 3: Hong Kong Housing Index



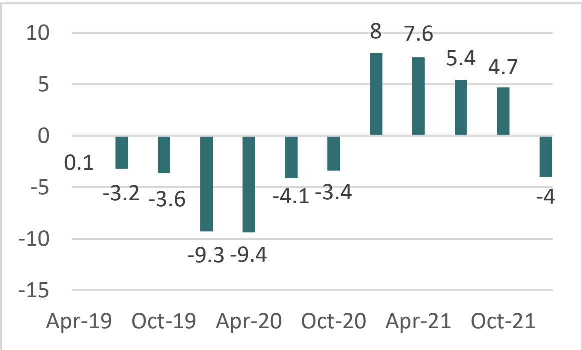
Source: Centaline Property Agency, Bloomberg

Figure 4: Number of Daily Covid-19 Cases



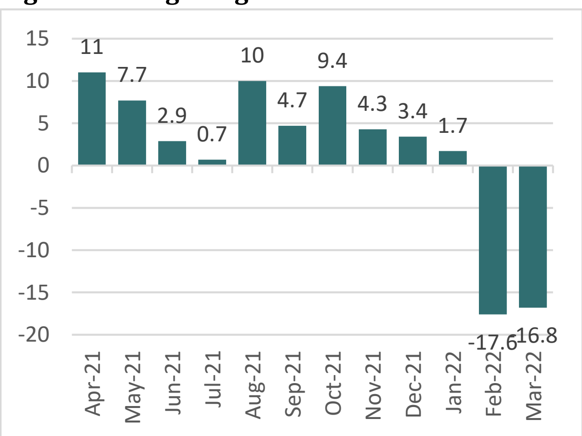
Source: Worldometer

Figure 5: Annual GDP Growth Rate



Source: Census and Statistics Department, Hong Kong; Trading Economics

Figure 6: Hong Kong Retail Sales Volume



Source: Census and Statistics Department, Hong Kong; Trading Economics

Dampened Growth From The Resurgence Of Covid-19

Resurgence Of Covid-19 Cases

For most of the first half of 2022, Hong Kong's healthcare system has been overwhelmed by thousands of cases being reported a day. To date, Hong Kong has recorded an additional 1 million + more cases since the start of the year. Furthermore, the city had charted 5600 deaths in the first quarter of 2022 alone (Fig. 4), as compared to only 200 in the initial 2 years of the pandemic.

Critics argue that the spread had been exacerbated by low vaccination rates among the elderly, which has induced Executive Carrie Lam to dial down on non-vaccinated individuals. Most notably, a vaccine pass scheme has been implemented, which requires individuals to receive the 3rd dose of the Covid-19.

Dismal Economic Growth

As a result in Q1 2022, Hong Kong has had its growth impeded. Hong Kong's real GDP shrunk by 4.0% from a year earlier, despite growing 4.7% in Q4 2021 (Fig. 5). It fell 3.0% on a seasonally adjusted quarterly comparison.

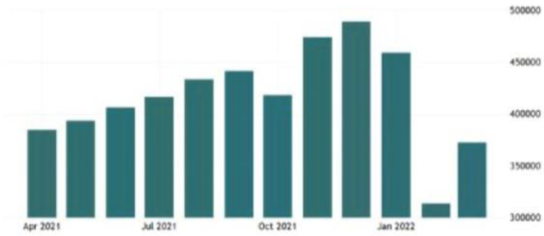
Internally, it faced the 5th wave of Covid-19, and imposed restrictive measures to curb the spread of the virus. Such measures had disrupted people flow and seriously dampened consumption activities. Resultantly, domestic demand has fallen greatly, with private consumption dropping 5.5% in real terms. Consumer confidence was further heavily dampened, as sales volume dropped by 16.8 % in March 2022 (Fig. 6). Business sentiment has also worsened as investment expenditure recorded a further drop of 8.4% in real terms. However, government consumption expenditure increased by 6.0% y-o-y in real terms, beyond the 4.1% increase in Q4 2021.

On a global scale, lagging global demand growth and global supply chain issues have led to Hong Kong recording a fall in total exports. Exports of goods and services make up an astounding 176.7% of its GDP and hence is a key component. In Q1 2022, Hong Kong recorded a 4.5% contraction y-o-y in real terms in Q1 2022 in total exports of goods. While exports to the U.S., EU and other strategic Asian markets had recorded moderate growth, exports to the mainland has taken a steep plunge. A worrying sign as trade with the mainland accounting for around 60%. Exports of services had fallen by 2.8% y-o-y in real terms in Q1 2022 (Fig. 7). Transport service exports have contracted with slower passenger flows and cargo movements, while exports of financial services have predominantly coincided with muted cross-border and financial activities. Travel services were virtually negligent with a lack of inbound tourism.

Unemployment also took a stark negative turn. Seasonally adjusted employment grew a percentage point from 4.0% in Q4 2021 to 5.0% in Q1 2022. Unemployment was most pronounced in consumption and tourism related sectors, the construction sector, and the arts, entertainment sector, with lower-skilled workers getting the short end of the stick.

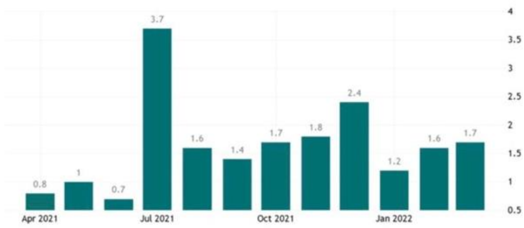
Among other indicators, Hong Kong has not been hit as hard in terms of inflation. Inflation has still risen, as the Composite Consumer Price Index increased to 1.6% y-o-y (up from 1.2% in Q4 2021, Fig. 8). As

Figure 7: Hong Kong Exports



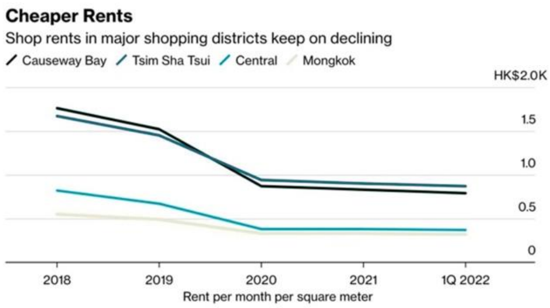
Source: Census and Statistics Department, Hong Kong; Trading Economics

Figure 8: Hong Kong Inflation Rate



Source: Census and Statistics Department, Hong Kong; Trading Economics

Figure 9: Cheaper Rents in Major Shopping Districts in Hong Kong



Source: Cushman & Wakefield, Bloomberg

with the rest of the world, prices of necessities have gone up amidst supply chain disruptions and the rise in energy and commodities prices from the tension in Ukraine. However Hong Kong faces mild cost pressures, such as soft rentals and mild local wages growth, inducing modest expected inflation.

Policy Response

To combat the pressure exerted on the domestic economy, the government has introduced a slew of counter-cyclical policies. For starters, they have initiated the additional 5th and 6th rounds of the Anti-epidemic Fund. Further expansionary policies in the 22/23 Budget include of over HKD 170 Billion, inclusive of HKD 66 Billion scheme to issue electronic vouchers to each eligible Hong Kong Resident. Moreover, the 100% Personal Loan Guarantee Scheme and other guarantee products under the SME Financing Guarantee Scheme have been enhanced to allow longer and more flexible application and repayment periods , alongside higher maximum loan amounts. Additionally, the Hong Kong Monetary Authority (HKMA) has extended the Principal Payment Holiday Scheme to end October 2022, further offering a one-year partial principal repayment option.

Worsening Outlook For The Property Sector

The Hong Kong property sector often takes centre stage at the back of residents' minds, infamous for charging astronomical rents, and makes up 68% of residents' household debt. In this period however, the residential property has gained little traction. Heightened borrowing costs induced from the Fed's rate hikes and a lack of demand stemming from the local pandemic situation, the number of residential property transactions have dipped by 45% from the preceding year. This marked the lowest amount of sales since 2018 (Fig. 9). Prices fell by 3%, while still deemed as unaffordable by many according to the index of home purchase affordability of 71%. Flat rentals have also contracted by 2% on average in this quarter.

On the non-residential front, prices have generally dipped in this quarter. As evidenced by Fig. 4, rents in major shopping district are at its all-time lowest since 2018.

Moving forward, the property sector faces worsening revenues, as Covid-19 restrictions continue to dampen locals' demand, while driving out residents out of Hong Kong. Many developers such as New World Development, Henderson Land and Sun Hung Kai recorded drops in their core earnings. New World Development revenue dropped by 72% y-o-y, while Henderson Land's local property sales dipped 24% in the second half of 2021. With the great uncertainty accorded to Hong Kong's Covid-19 restrictions and business conditions, the property sector looks set to record muted growth in the near future.

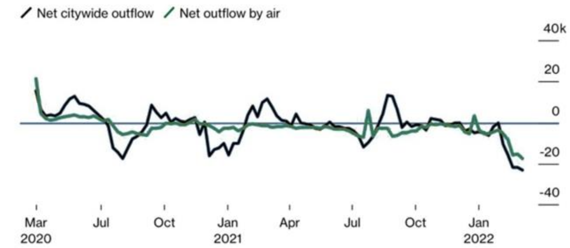
Dismal Performance Of The Hang Seng Index (HSI)

2022 has been a turbulent time for global markets, particularly for Hong Kong, as it showcased protracted volatility. Increased borrowing costs following Fed's hikes, the tensions in Ukraine, uncertainty over regulatory requirements in the mainland and the local epidemic situation all served to generate a sharp correction February to March. However with greater uncertainty induced from mainland authorities banning livestreaming of unauthorized video games, and earnings

Figure 10: Performance of HSI

Source: Trading View

Figure 11: Net Departure of Hong Kong



Source: Hong Kong Immigration Department, Webb-site.com, Bloomberg

faced continued downward pressure, the HSI has plunged 11.3% YTD to 20,644.28 (Fig. 10).

<u>Hong Kong's Short Term Risk Well Paves The Way For Future Optimism</u>

The short term outlook for Hong Kong has been bleak with uncertain consumer demand and business conditions. However, with greater indication from Hong Kong authorities of opening up the city, and daily cases falling significantly to below 1000 from its all-time high above 79,000 should not rule out the room for tailwinds of Hong Kong opening up. This would boost demand for services, a key sector of its economy, while boosting property developers' top-lines. With that said, long term risks remain amidst the city's contested competitiveness.

Looming Concerns For Investors Over Hong Kong As An International Financial Centre

<u>The Great Exodus Of Hong Kong</u>

Violent protests that erupted in 2019, stringent Covid-19 restrictions and a 4% dip in the economy's GDP are only but some of the symptoms of Hong Kong's position as Asia's international financial centre. Since February 2022 alone, a net 130,000 individuals have left Hong Kong, with a starker difficulty to draw in talent to the city (Fig.11). Moreover, according to EuroCharm, almost 50% of European business and 44% of U.S. businesses are contemplating relocation in the coming year. This serves as a grim indicator that Hong Kong may not be the international financial centre it once was.

<u>John Lee's Appointment: Law Enforcement Over Financial Recovery</u>

In May 2022, John Lee was elected as the as the new Chief Executive-designate of Hong Kong. More pointedly, his appointment is seen as how Beijing prioritises law and order in ruling Hong Kong in the near future. Lee's background is that of a police officer, notably a law enforcer. He had overseen the crackdown on the local protests in 2019 and the initiation of the national security law. Experts further support this view, purporting that had Beijing wanted to prioritise financial recovery, they would have instead backed Carrie Lam's financial secretary, Paul Chan instead.

Lee has pledged to strengthen governance and tackle housing problems in the city. He has also promised to strengthen the national security law, potentially adding clauses on top of what has been in place.

Actions following his selection are in line with the signal of his appointment. In mid-May, Hong Kong authorities have been touted to consider curtailment of public access to the messaging service of Telegram, due to potential widespread doxing or privacy encroachments. Several individuals have also since been charged under the act, most notably retired bishop Joseph Zen, former legislator Margaret Ng, academic Dr Hui Po Keung and pro-democracy activist Denise Ho.

Operational Uncertainty Amongst International Players

With national security at the forefront of authorities' agenda, companies and investors based in Hong Kong have started becoming increasingly wary staying in the city. The biggest fear seems to be how failing to toe the line with the authorities could make it prone to asset seizures. Furthermore, as the NSA is capable of freezing assets and breaking a company, international investors and businesses face greater risk over investing in Hong Kong. These stakeholders too do not want to be caught in the crossfire between Hong Kong and their home economy.

What It Means For Hong Kong Moving Forward

We believe that all is not bad for the Hong Kong economy, but it will be different. We believe that as security is heightened, so will information be more tightly controlled. Indeed, many international investors may be jittered by the uncertainty ahead, and decide to eventually pack their bags to other financial destinations like Singapore. It also signals a potential Hong Kong is will no longer play the role of an intermediary between the mainland and the rest of the world. However, it provides a further opportunity for greater collaboration with the mainland.

Figure 12: Short USDHKD

Source: Tradingview

Trade Idea – Short USDHKD

In the past 6 months, the Hong Kong Dollar has been about a bearish fall, primarily due to the dampened confidence on Hong Kong's economic growth brought about by its pandemic related restrictions. Similarly, uncertainty over Hong Kong's competitiveness as a global financial centre has thwarted investors' confidence of Hong Kong.

In our view, we believe that with the relaxation of Covid-19 related restrictions, the economy would recover as its retail activity rises to pre-surge levels. While not immediate, in the short term this could result in a renewed economic growth, as the service sector accounts for over 90% of Hong Kong's GDP. Yet, from a long term point, we believe that Hong Kong's competitiveness would be perceived as investors as being threatened, amidst a greater priority accorded to security over financial recovery with John Lee's appointment and the underlying uncertainty in Hong Kong's direction for business.

We thus propose a short-term bullish strategy against the HKD amidst the reopening of the economy. Since 14 January 2022, the USD has vastly appreciated from 7.78262 to its highest at 7.85000. Furthermore, the Relative Strength Indicator while high is tending towards overbought territory at 66.56, making it primed for a trend reversal. Noting that the HKD is pegged to the USD at a band of 7.75 – 7.85 USD/HKD, a natural resistance level is capped at the upper bound 7.8500.

We believe a sideways trend at the upper bound of the currency range will form, as seen in the chart. Therefore, we believe it is profitable to open a short position at 7.84777, slightly lower than what the price currently is at 7.84953. We take profit at 7.84498. Our stop loss is at 7.84873, just below the current resistance level. All in all, the trade has a risk/reward ratio of 2.91.

Entry: 7.84777
Take Profit: 7.84498
Stop Loss: 7.84873
Risk Reward Ratio: 2.91

NUS INVESTMENT SOCIETY

Global Macro Department – Taiwan (NEUTRAL)

Date: 19th May 2022

Analyst

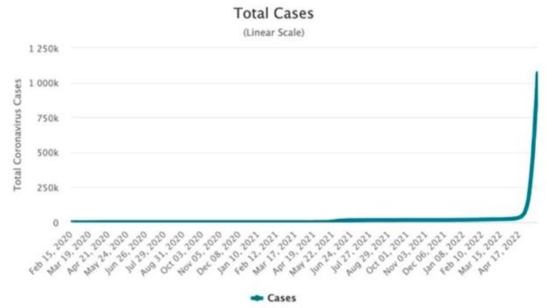
Stephanie Tan Xin Yi
Global Macro Analyst
stephanietanxy@u.nus.edu

Basic Information

GDP (US$)	347B
GDP Annual Growth Rate (Q1)	3.06%
Inflation Rate	3.38%
CBC (TW) Base Rate	1.35%
CPI	107.14
Unemployment Rate	3.66%

Chart info

Figure 1: Total Number of Covid-19 cases in Taiwan



Source: Worldometer

Figure 2: Taiwan's Key Discount Rate Over The Years (%)

Source: Central Bank of the Republic of China (Taiwan), Trading Economics

Overview Of Taiwan

Taiwan is a strategic export-oriented economy, holding a critical role in the global supply chain. Its GDP is underpinned by over 40% accorded to exports, with electronics holding the biggest foothold. Known as a semiconductor powerhouse, it is home to large foundries, notably TSMC, that have been thriving amidst the global supply shortage. Initially known for its impeccable control of Covid-19 cases in its first wave, Taiwan now faces a greater challenge amidst daily cases surpassing 50,000. With its main trading partners being China and Hong Kong, it is highly susceptible to their economic underpinnings and political moves.

Thereby a more poignant concern appears for investors of Taiwan: the fear of an invasion by China. Sparked by the invasion of Ukraine by Russia, many investors fear that Taiwan may experience a similar fate.

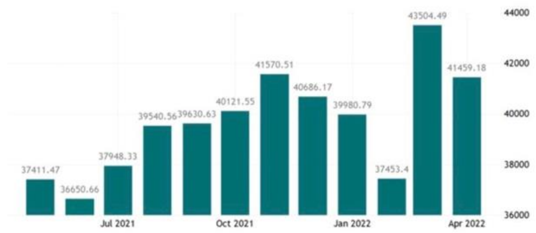
Summary Of Events In The Past 6 Months

- Beijing has underlined that its claims on Taiwan are "not comparable" with that of Russia and Ukraine. The mainland further claims Taiwan as part of its territory and has not ruled out the possibility of achieving unification using force.
- The U.S. had sent a delegation of ex-defence officials, led by Michael Mullen, to Taiwan. This was intended to reassure Taiwan of U.S.' support and a reminder to China not to increase pressure on Taiwan, while the U.S. focuses on the conflict in Ukraine.
- The invasion of Ukraine have sent investors in Taiwan looking for hedging opportunities. Clients across the globe see close parallels between the relations of Ukraine-Russia and Taiwan-China.
- Taiwan's Central Bank raised the benchmark rate to 1.375%, up 25 bps from before. This rate hike was done to curb inflationary expectations of the public, and maintain price stability for consumers.
- Following mid-April, Taiwan has experienced a huge surge in Covid-19 cases, particularly due to the Omicron variant. Daily cases in May have surpassed 50,000, a stark contrast from that of around 100 and below in the initial 2 years of the pandemic.
- To manage the tension between Covid-19 and economic growth, the government has chosen to shorten the isolation period for those infected in an attempt to lower the risk of the economy. However, as vaccination booster rates were below target at 55% (April 2022), many consider the current measures insufficient to curb the spread of the Omicron variant.
- Electrical shortages have started to plague Taiwan again due to the hot weather. Fears over electricity issues leading to a suspension of factory operation have arisen, as with how both water shortages and electricity issues had severely affected the production and shipment of economic growth in 2021.

Figure 3: Annual GDP Growth Rate (%)

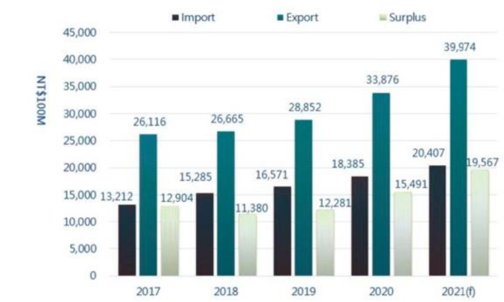
Source: National Statistics Republic of China (Taiwan)

Figure 4: Taiwan's Exports



Source: Central Bank of the Republic of China (Taiwan), Trading Economics

Figure 5: Import/Export Value of Taiwan IC Market



Source: Taiwan Customs; TSIA, ISTI-ITRI

Dampened Growth Outlook Despite Taiwan's Initial Economic Recovery

<u>Recovery Driven By Taiwan's Strategic Position In The Semiconductor Industry</u>

Economic Activity was mostly healthy in the first quarter of the year. GDP in Taiwan grew by 3.06% in Q1 2022 after attaining 4.86% y-o-y growth in Q4 2021. Total exports grew over 20% y-o-y in Q1. The main engine of growth was in the production and exports of the semiconductor industry. Retailed had underperformed, and catering increased by 4.93% with government support.

<u>Trade</u>

Exports in Taiwan have been doing fantastically, recording a 23.5% in Q1 2022, at USD 120.93 Billion. Imports grew 25.8% in the same timeframe, at USD 105.46 Billion. Taiwan recorded a trade surplus 9.9% from the same period in 2021.

In March 2022, exports in rose for the 21st consecutive month. In March alone, it further rose 21.3% from 2021 to USD 43.50 billion, breaking the previous threshold of USD 41.58 billion. This was a result of steady growth of the global economy and an increasing demand for key components required for advanced technologies. Increased opportunities have been created for emerging technological applicants in 5G, the Internet of Things, high-performance computing and the automotive electronics have and are leading customers to increase orders for chips to ensure a smooth running of supply chains. Coupled with the rising global commodity prices and plugging raw material shortages in the supply chain, semiconductors exports have grown 35.2% and exports of products made of steel and other base metals have increased poignantly by 30.1% in Q1 2022.

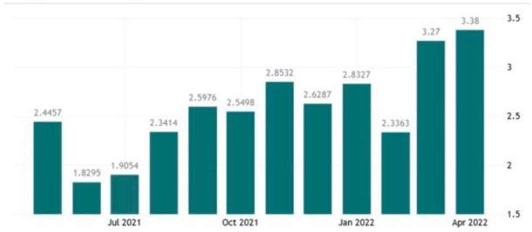
Imports likewise increased 20.3% in March to USD 38.85 billion, primarily due to the astronomical prices for oil and other fuels.

<u>Expectations For The Semiconductor Industry</u>

There are high expectations for Taiwan's biggest industry. According to the Industrial Technological Research Institute, Taiwan's semiconductor industry is expected to grow by about 19.4% to USD 164.24 billion in 2022 due to stronger growth of its foundries and the chip crunch. Taiwan's semiconductor industry likewise is also expected to outpace its global peers, which are only expected to grow 10.4% this year.

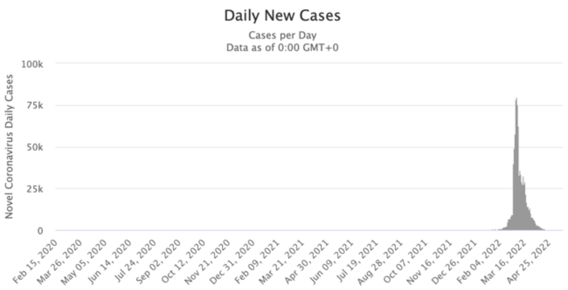
TSMC alone posted revenue of the first 4 months of 2022 to NTD 663.64 Billion, a 40.1% increase from 2021. Powerchip Semiconducror Manufacturing Corp, a firm which mainly makes display drivers and power management ICs, recorded a 48% y-o-y increase in revenue to NTD 7.33 billion. Chip designers production value is also expected to rise 14%, to hit NTD 1.38 trillion in the coming year. Hardest chip designer MediaTek also recorded revenue to increase 35.08% to NTD 195.34 billion in the same period. The only sub-industry of memory chips had a downward revision of its production value, still clocking a 7.6% increase to NTD 309.8 billion.

Figure 6: Taiwan Inflation Rate (%)



Source: Directorate-General of Budget, Accounting and Statistics, Taiwan; Trading Economics

Figure 7: Number of Daily New Cases in Taiwan



Source: Worldometer

As the forces of increasing demand of global components, Taiwan's exports look to rise in the semiconductor industry. While semiconductor equities have recently underperformed, it is as severe the case for Taiwanese firms. Alongside promising results from last quarter, TSMC looks to clear backlog from chip makers desiring to fulfil the high demand.

Inflationary Pressures on Taiwan

Inflationary prices are starting to take a toll on Taiwan. Owing to the Russian invasion of Ukraine and Covid-19 lockdowns by China disrupting the global supply chains and pushing up commodity prices, In April 2022, Taiwan's CPI grew 3.38% y-o-y, its highest since August 2012. In the first 4 months of 2022, the local CPI had grew 2.95% from 2021.

Underlying trends that set to raise prices will continue to persist. Trade tensions between U.S. and China have disrupted economic trade globalization, will continue to raise product prices. Similarly, the commitment to carbon reductions in many economies have low rise raised energy prices. As Taiwan's government looks to increase spending over caring for an aging population, and the central bank maintains a loose monetary economic policy to facilitate growth, Taiwan may well to face long term inflationary pressures.

However, Dismal Growth Looks Set To Follow

Two main issues have emerged since that look to stunt growth in Q2.

Firstly, the number of Covid-19 cases have increased significantly. On May 5, Taiwan recorded over 30,000 new Covid-19 infections, crossing the daily threshold since the start of the pandemic, with signs over worsening as over 50,000 daily cases are reported recently. The nature of the Omicron variant makes Covid-19 a lot more transmissible. Facing this spike in cases, the government launched a "new Taiwanese model" of Covid-19 containment, and asymptomatic and mild cases to be isolated at home. The quarantine period for close contacts has been reduced to 3 days from 10, and to 7 days for arrivals. While this policy allows for a greater balance between the prevention of spreading the virus, and reopening the economy, the short-term effects of this spike will stunt growth in Q2. Workers' health and jobs would likewise be at risk.

The second issue is that of electricity shortages due to hot weather. Blackouts are expected on some days in Q2 and could well lead to suspensions of production facilities as it did in the summer of 2021. As what happened then, a potential fall production and shipment of semiconductors could reoccur in Q2 2022 too.

Overall Impact On The Economy

What does it mean for Taiwan? While growth will be driven by the global need for semiconductors, it may be stunted by the production in capabilities due to electrical issues. Similarly, the spike in Covid-19 cases will have an adversary impact on the retail economy. However the greatest uncertainty lies in the parallels drawn between Ukraine-Russia and Taiwan-China.

A Less Dangerous Geo-political Threat Than Expected

Parallels drawn between Ukraine-Russia and Taiwan-China

Beijing has maintained that Taiwan remains part of the motherland, and will not rule out force to achieve reunification. As such, many in the international scene point out certain such similarities across both relationships, and ask would such a situation repeat itself in Taiwan?

International Reception: Strong Words But Little Action

Major U.S. allies have come together to stand against Ukraine, while notably bringing up its commitment towards hostile action against Taiwan. Almost immediately after the invasion of Ukraine, the White House sent a delegation of former high-officials to Taiwan, aiming to underline its commitment to guard against any invasion on Taiwan and to remind China not to step up pressure on Taipei. Kishida and Boris Johnson likewise warned how there is a "direct read across" from events in Europe and Asia, with Kishida underscoring how there is a need to show a "resolute stance" against Ukraine to help ensure peace and stability in Taiwan. Furthermore, the U.S. has sounded out its desire to boost co-operation with allies on what it perceives as China's "increasingly assertive attitude" on Taiwan.

Yet with that said, a common realisation of western countries' lack of direct action. Indeed these countries have provided aid and weapons to Ukraine, but have pointedly not gone in physically to engage in the conflict. This commonly sparks fears over how close the U.S. military is to its claims. The U.S. has committed to helping Taiwan defend itself, but it was never quite certain over whether direct intervention would be guaranteed. U.S. actions, if anything, seems to prove little that the U.S. would fully partake in the defending Taiwan, increasing greater risk when investing in Taiwan.

Moreover in May, U.S. business groups have even accused the U.S. government of undermining Taiwan's defences, casting further doubt on U.S.' true commitment towards Taiwan. They purport that the U.S. government only approve the sale of weapons it believes it would be essential for Taiwan to resist a full Chinese invasion, and not any more. Particularly, Washington seeks to discourage sales of advanced fighters and warships, that could create gaps in the Taiwanese armed forces capabilities, and erode Taiwan's long term ability to deter and defend all phases of an invasion.

Weak Military Capabilities Of Taiwan

An incursion by a Chinese aircraft in Dongyin highlighted not just the risk of an invasion, but the weakness of Taiwan's military. The Taiwanese military seemed to have a slow reaction and an explanation of the incident that did not correspond with what happened on the ground. This has since sparked concerns over Taiwan's armed forces' early warning military capabilities.

The Unlikely Scenario Of An Attack

Yet, an invasion of Taiwan is unlikely. Analysts in the region are of the opinion that there is no clear indication of any imminent major Chinese military action, nor for any in the future. In fact, we believe that China's responses of repeating its claim on Taiwan is in line with what China has always said and have been induced due to perceived provocation from western allies.

Other analysts believe that China would also be more cautious after observing how reunification may not always be welcome. By the local community, there is a strong chance of resistance, like what Ukraine had done. Internationally, China would be susceptible to international sanctions and disruption in trade flows. As an export-oriented country, China still is heavily reliant on international trade flow, as domestic consumption only accounts for above 30% of the Chinese economy.

That said, many observers reckon a reunification of China and Taiwan is a real possibility through peaceful means. Such an approach was unveiled in 2018/19 to encourage young Taiwanese individuals and firms to cooperate with mainland partners through visiting and starting joint companies. Furthermore, the same campaign of a peaceful reunification was brought up in early 2020 and October 2021. A peaceful approach for China would result in a much better outcome for itself and lend less credence towards an outright invasion.

What It Means For Taiwan

There will still be adverse effects given the uncertainty of the risk of invasion. Around 50% of Taiwan's trade is with China and Hong Kong, and a political conflict would direct more resources towards the defence industry, stymying future domestic and international investments. The possibility of invasion alone could itself reduce investment in Taiwan, impeding economic growth.

But we believe that the risk of China invading Taiwan has been overblown. The viability of a peaceful reunion, the backlash from the international community and possible Taiwanese resistance from support against an invasion.

Figure 8: Long USDTWD

Source: Tradingview

Trade Idea – Long USDTWD

In the past few months, the USD has been on an uptrend against the TWD. This is mainly due to fears and uncertainty surrounding China-Taiwan relations. It is further fuelled by the drop in confidence of the Taiwan economy due to the surge in cases, and the electricity shocks rattling it. Furthermore with the Fed's hawkish stance, greater money inflow into the US is expected.

The currency pairing is seen to be consistently bounded within a predictable upwards movement, and the price levels constantly being above the 9-day Moving Average. On 17 May, we also notice a positive reversal, through the price attaining a higher low and RSI making a lower low. This implies that there could be a further bullish run , where prices could proceed to rise in the short run.

In this strategy, we want to quickly take profit, as we realise there may continue to be short-term pessimism against the Taiwanese economy, but not in the long run. In line with the upwards support and resistance levels, we believe it is profitable to open a long position at 29.645, just below the current price. We take profit at 30.078, the width corresponding to that of the support-resistance bands. Our stop loss will be at 29.539, and this trade has a risk/reward ratio of 4.08

Entry: 29.645
Take Profit: 30.078
Stop Loss: 29.539
Risk Reward Ratio: 4.08

Analysts

Jonathan Audie Widjaja
Global Macro Analyst
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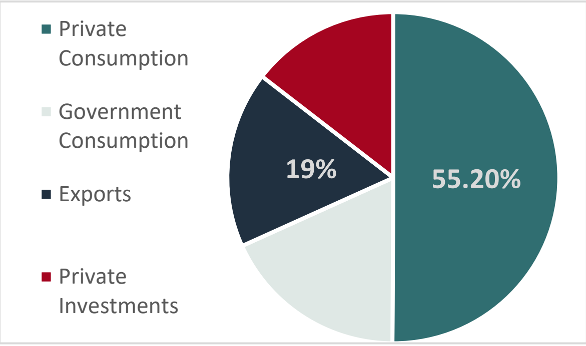
Basic Information

Real GDP (US$)	5.06T
Real GDP Growth Rate Q4	1.3%
CPI (Apr)	101.5
PPI (Apr)	113.5
Con. Confidence (Apr)	33
Currency	JPY

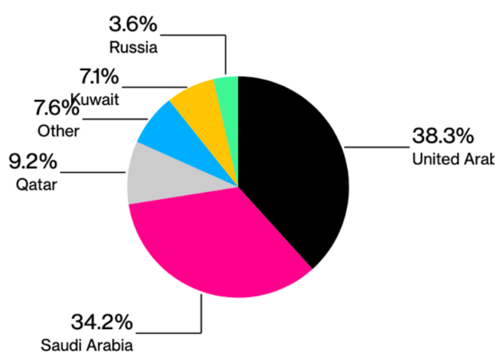
Chart info

Figure 1: Breakdown of GDP by Component



Source: JapanMacroAdvisors.com

Figure 2: Dependence on Energy Imports



Source: Bloomberg.com

Overview of Japan's Economy

The Forgotten Superpower

Japan has a highly-developed, service-oriented economy. Behind only the United States and China, the third largest economy in the world boasts a nominal GDP (USD5.06 Trillion in 2020). As seen from Fig. 1, by component, private consumption makes up 55.2% of GDP, followed by government consumption at 20%, exports at 19%, and private investments at 16%. By sector, Japan's service sector makes up 69.3% of GDP, with Industry and Agriculture making up 29% and 1.2% respectively.

A Relic From The Past

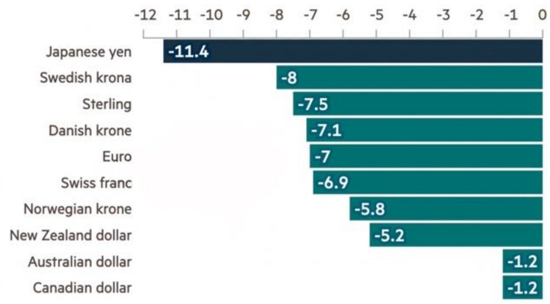
Japan has had a long and storied disposition towards deflation. This was a feature of Japan's Lost Decades, an amalgamation of unfortunate and untimely events that crushed Japan's dominant rise as an economic power in the 90s. Low interest rates, which were further exacerbated by the effects of the Plaza Accords, had led to a real estate and stock market bubble. This came crashing down in 1989 as Japan abruptly raised interest rates in an attempt to curb inflation. What started off as debt deflation spiralled into a credit crunch, even as the country cut interest rates in 1991. Japan's already ageing population then fell into an inflation expectations trap, which led to muted consumption spending. The Japanese populace have become very accustomed to deflationary pressures, which has contributed to a high national savings rate of 23%.

Summary of Events in The Past 6 Months

- Russia's invasion of Ukraine has set forth complications that have rippled throughout global markets, and Japan's economy is no exception to the repercussions that are continuing to unfold today. Perhaps most prominently, Japan has joined its G-7 and EU allies in banning Russian coal imports as part of a resolute international response to target Moscow's energy sector.

- Doing so is incredibly challenging on Japan's part, given how dependent it is on imports for its energy needs. This is seen in Fig. 2, with Russia accounting for 3.6% of its total energy imports. Further breaking that down, Hiroshima imports more than half of its gas supplies from Russia, and Tokyo imports about 10%. Prime Minister Fumio Kishida has therefore spelled out the nation's efforts to gradually lower their energy dependence on Russia through diversification from either Indonesia or Australia. In the near term, Japan's energy security sensitivities remain a pressing pain point.

Figure 3: Yen Performance



Source: FT.com

- Japan's gross domestic product is anticipated to see an annualised contraction of 1.8% over the first quarter of 2022. This follows the surprise 4.6% expansion that we observed in just the previous quarter, which translates to a quarterly 0.4% contraction. The slump is primarily attributable to the lingering effects of the Omicron variant that set Japan back by weakening the strength of its household consumption as well as in its exports. The economy is expected to rebound as the country exits the pandemic era, although the outlook remains clouded by the persistent after-effects of the Russia-Ukraine fallout.

- During its meeting on the 28th of April, the Bank of Japan (BOJ) revised its inflation projections for the year ahead from 1.1% to 1.9% now. BOJ has expressed their belief that the observed surges in energy prices are just as temporary as they are volatile. Hence, they remain committed to policy efforts that will help them achieve and sustain their 2% inflation target.

- The Yen continues its freefall against the greenback, as it becomes the worst performing currency in the G-10 (Fig. 3). Yet, BOJ maintains that the weak Yen is beneficial for the export-heavy economy, despite it exacerbating the effects of rising energy prices on households and businesses alike.

- At the time of writing, PM Kishida expressed the ruling coalition's willingness and intention to take additional steps to ease the burden on households caused by sky-high energy prices. Instead of raising rates, they are considering spending over 1 trillion yen on a new economic stimulus package.

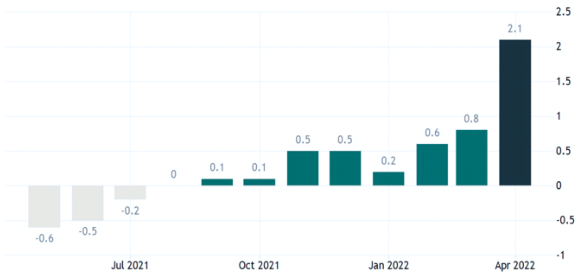
- As expected and in line with the BOJ's historical bias, Japan appears to show no signs of pivoting towards policy normalisation. This is even as central banks worldwide have begun tapering asset purchases and hiking interest rates. This hawkish tilt is unlikely to feature in Japan's economy anytime soon, at least throughout Kuroda's remaining tenure as BOJ's Governor, which ends in April 2023. For the time being, expect Japan to carry on with their yield curve control and easy monetary policy.

It's Getting Hot In Here – Japan's Dance with Inflation

Rising Inflation Levels in Japan

Against the already turbulent backdrop of an inflationary environment and economies collectively throwing everything it can at the pandemic to return to normalcy, the conflict between Russia and Ukraine has only served to exacerbate the existing tribulations that are rife in today's landscape. While the lingering effects of intermittent supply chain disruptions caused by the pandemic have continued to prop up global commodity prices, the main instigator of the immense price pressures that we observe are the supply tensions that arise from the war. Given the interconnected and globalized nature of today's economies, Russia's decision to invade Ukraine has proven detrimental to global supply chains. Russia plays a pivotal role in that it is a major supplier of commodities like oil, LNG, and metals. Removing such a deeply ingrained piece in one's supply chain has inevitably driven up prices by virtue of demand and supply. Therefore, convergence of the war, inflation, the pandemic, and existing supply-chain complications have led to price surges across the globe that have even begun to affect Japan – certainly a rare occurrence for the deflation-prone nation.

Figure 4: Japan's Core Inflation Rate



Source: Tradingeconomics.com, Statistics Bureau of Japan

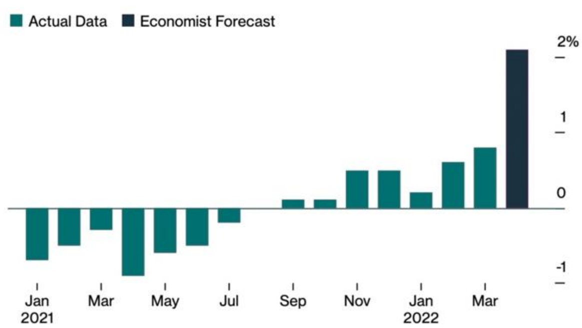
During its April meeting, the BOJ aptly revised its full-year inflation forecast for the 2022-2023 financial year upwards. In 2022Q1, the central bank projects core consumer inflation to hit 1.9%, up from the previously expected 1.1%. This reflects the sharp gains in elevated commodity prices, and is the highest reading since 2014. It also acknowledged that, in the face of rising inflationary pressures, wage and price increases are also expected to broaden as the Japanese economy resumes on its recovery trajectory beyond the pandemic – of which they have lagged their peers. Over the past year, inflationary pressures in Japan have been creeping up gradually year-on-year, turning a positive reading in September 2021 for the first time since the start of the pandemic. Since then, the upward trend has shown to strengthen persistently. As seen from Fig. 4, the core inflation rate is averaging 0.53% in 2022Q1 (0.2% in Jan, 0.6% in Feb, 0.8% in Mar). The 0.8% increase in the Consumer Price Index, which excludes fresh food but includes cost of fuel, reflects the fastest growth since January 2020 and is indicative of the rising energy costs beginning to impact consumers.

Figure 5: Growing Margin in PPI and CPI

Source: Bloomberg.com

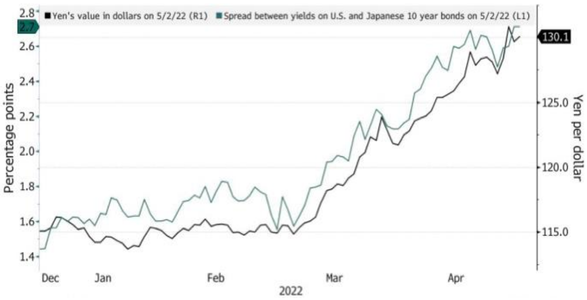
To aid in grasping the magnitude of the inflationary bout that has pervaded Japan, it is worth looking into the Producer Price Index as well. Japan's PPI has been on an aggressive uptrend for more than 12 consecutive months at the time of writing, most recently hitting 112 points in March 2022. Referencing Fig. 5, producer prices in Japan have risen by 9.3% yoy as of February, as part of a longstanding growth trend that does not appear to be abating. This is in stark contrast to the growth in core consumer prices, which has been relatively flat around the 0.6% range. Evidently, there has been a growing gap between producer and consumer inflation in Japan, and this margin has hit the highest level since 1980. Going forward, we see corporate profit margins are being increasingly strained, and that this pressure will eventually reach a tipping point that will force the hands of Japanese companies to pass on, albeit reluctantly, the higher costs to consumers. This is especially significant given the Japanese context where companies have always hesitated to pass on higher costs to

Figure 6: Projected Inflation Rate in Q2



Source: The Economist, OECD

Figure 7: Yen Slides to a 2-Decade Low

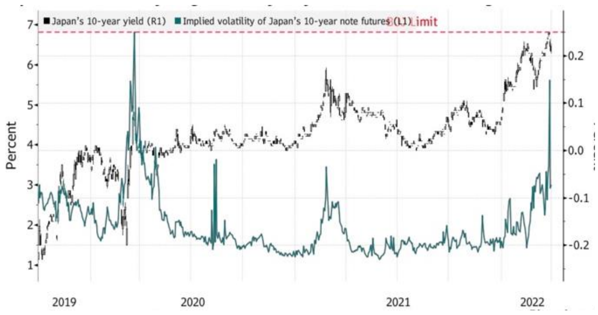


Source: Bloomberg.com

consumers, preferring to absorb them instead, due to how deeply entrenched deflation is in their economy. However, we see this bout of inflation and its unabating pressures overwhelming their caution and push them to a breaking point, necessitating them to recalibrate their strategies and pass down costs that will eventually lead to higher price tags for consumers. This will gradually lead to a growing CPI figure over the course of the year.

Furthermore, the inflation figures preferred by BOJ have been artificially depressed by the sharp, government-initiated reduction of up to 60% on mobile phone charges. These had previously caused quite a significant drag on overall prices over the past year. As the cell phone fee cuts begin to dissipate heading into 2022Q2, alongside the aforementioned factors of rising energy costs and margin pressure, core consumer inflation is anticipated to accelerate higher to average approximately 2.2% in 2022. Latest figures from May show that the core inflation rate has indeed shot up to 2.1% (see Fig. 6).

Figure 8: Surging Bond Volatility



Source: Bloomberg.com

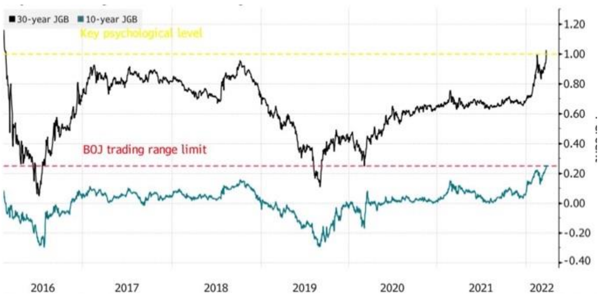
Letting the Yen Freefall

Historically, the Yen has served as a safe haven currency that investors flock to during uncertain times to protect their capital. However, despite the looming risks of recession around the world and structural threats to the dollar, the recent depreciation of the Yen has made it the worst performing major currency in this year thus far, which calls to question if it is still worthy of upholding its safe haven status.

As seen from Fig. 7, at the time of writing, the Japanese Yen has slid more than 12% against the U.S Dollar within the span of less than two months, underperforming even the Argentine peso and the Turkish lira. The Yen now stands at around the 130 yen threshold, its lowest level in 50 years, and this freight train downwards is showing no signs of stopping anytime soon. This state of yen weakness is primarily a consequence of policy divergence between the BOJ and the U.S. Federal Reserve. It comes as no surprise that the U.S. has explicitly articulated and followed through with their promises to hike rates gradually over 2022, thus adding strength to the USD. From Fig. 8, we see the surge in implied volatility of Japan's 10-year notes futures. This is indicative of the mounting pressure that the global wave of monetary policy tightening is putting on Japanese Government Bond yields. However, BOJ has maintained that they will not deviate from their plan to stick with the current ultra-easy monetary policy. This entails proceeding with yield curve control through 2022, where short term rates are kept at -0.1% and long term rates at around 0%. We can expect the central bank to continue purchasing Japanese Government Bonds (JGBs), Exchange-Traded Funds (ETFs), and J-REITs. We believe that the reason that the BOJ stays loyally wedded to this approach lies in their view of this current bout of inflation. Governor Kuroda has expressed that while inflation may well exceed their 2% target, it will be unsustainable due to the cost-push nature driving it. Further contributing to this view is the absence of wage growth, and a lack of any indication that the Japanese populace have grown to accept higher prices, which will arguably be extremely difficult to accomplish and will take time.

Therefore, we are convinced that, given the BOJ's conviction with their existing measures, the Yen will continue to tumble against the greenback through 2022. It appears that the BOJ is committed to

Figure 9: Rising Bond Yields



Source: Bloomberg.com

keeping a lid on JGB yields, and this has several implications for different stakeholders. For investors, this presents an opportunity to capitalise on BOJ's policy moves as they are pretty much the only central bank that is actively easing. This may express itself in the form of carry trades, where the ultra-loose policy incentivizes investors to borrow the Yen in order to seek out assets that offer higher returns elsewhere. Any form of FX intervention will have to be carried out by the Ministry of Finance. Yet, we see intervention as unlikely due to the fleeting impact that it will have against the backdrop of continued yield curve control from the BOJ.

Bank of Japan's Obsession with Quantitative Easing

The BOJ is historically notorious for being dovish and unconventional in their use of policy tools to influence the economy, having pioneered quantitative and qualitative monetary easing (QQE) from the late 90s to resuscitate the economy from economic stagnation. These include maintaining negative interest rates, as well as increasing the volume and broadening the scope of asset purchases. From the willingness that they have demonstrated to let the Yen resume its freefall against the greenback despite the strain that it places on household consumption, it is evident that their historical bias continues to hold steadfast despite other advanced economies already cutting back on their asset purchases and even raising interest rates.

Governor Kuroda, who is on his 10th and last year of his tenure in the BOJ, continues to express the merits in maintaining a weak currency, citing it as a boon to Japan's export-focused economy as it can boost the profits of large exporters. However, the weakness of the Yen has extended to a point where it has become politically challenging to defend the BOJ's reluctance to cut back on quantitative easing. Japanese households are currently faced with a toxic cocktail of both rising prices as well as a weakening currency. This double shock to the populace is brewing discontent as household disposable income and spending power is getting slashed significantly at a time where the outlook is supposed to look brighter as Japan exits the pandemic era. Consequently, there has been mounting speculation that, at the very least, political pressures could spur the BOJ to inch back on the ultra-loose money policy, or that the Ministry of Finance could engage in FX intervention.

At the most recent BOJ meeting in April, the BOJ doubled down on its commitment to keep 10-year bond yields close to 0% and short term rates at -0.1% as part of their continued yield curve control. And they do so through 2 components, the first being regular scheduled operations. The second occurs via what is known as a fixed rate operation. Most recently in April, BOJ reiterated its ultra-loose money policy stance by proceeding with a week of unscheduled unlimited buying of JGBs. This was a move deemed necessary as the benchmark 10-year yield threatened the 0.25% upper limit of their tolerated trading threshold (see Fig. 9) despite announcing unlimited bond purchases for the first time since March. This solidifies their commitment to yield curve control despite mounting political and market pressure in the form of U.S. Treasuries putting upwards pressure on bond yields and the incredibly weak Yen. In essence, BOJ's constant defence of the 0.25% upper limit by buying unlimited JGBs shows that they will take aggressive measures to keep yield curve control. We believe that perhaps the only hard trigger for policy change would be the occurrence of stable inflation in the country, regardless of how much the Yen tumbles.

Japan's circumstances are unique in that they have been presented with a once-in-a-generation opportunity to achieve its coveted and elusive inflation target of 2%. However, simply hitting that 2% target is insufficient. The success of Japan's inflation mandate is contingent on sustaining and maintaining that 2% level. Abandoning yield curve control prior to that would be premature. BOJ therefore will not hesitate to resume on this trajectory if it means ultimately dragging the economy out of its deflationary mindset, spurring demand, and reflating the Japanese economy. We are of the view that BOJ is keeping a keen eye on developments in long-term price expectations to gauge if inflation is simply transitory or if it has been positively embedded to the point where the foundations for a healthy demand cycle is established in this economy. Only then do we think they will show a willingness to withdraw monetary stimulus and emerge out of their decades long QE experiment – although we still have a ways to go from that outcome. In other words, wage driven inflation is the key indicator that we are looking out for when it comes to Japan. For now, we expect speculations on shifts in monetary policy to continue teasing the markets, but we are confident that the BOJ will not deviate from its current strategy for as long as Kuroda is at the helm.

This policy divergence will see the Yen depreciate further against the currencies of countries that have begun to take a more hawkish stance with their policies. Additionally, the weaker Yen is bound to exacerbate the effect of rising commodity prices globally, which may worsen net exports, increased consumer prices. and dampened spending. This likely sequence of events is not ideal for an economy whose fragile economic recovery thus far has relied primarily on exports and household spending.

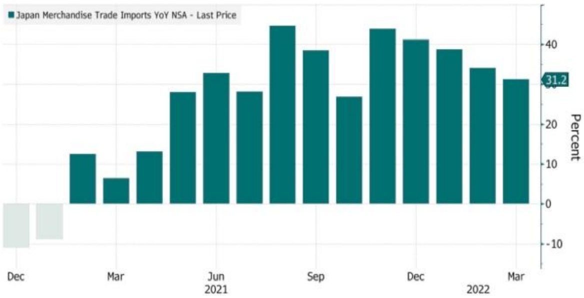
United We Fall – Shaky Economic Growth

<u>Fresh Stimulus</u>

Japan's economy is rife with glaring structural limitations that directly hinder their growth potential. Since the peak of its economy in 1989, Japan entered The Lost Decades that was characterised by deflation and economic stagnation. Inflation expectations were non-existent in Japan, which led to households and corporations saving instead of spending or investing. Time and time again, even prior to the pandemic, it was shown that even aggressive pursuit of easy monetary policy has a muted effect on the economy if Japanese firms have low demand to invest and consumers have low incentive to spend. On top of this, Japan faces the pressing issue of an ageing population where it has seen a reversal in its population growth. While this has With less people in the workforce, there will be a diminished middle class and hence less robust consumption spending in the economy.

Japan is well aware of the predicament that it is currently in. Policy divergence has driven the Yen to unprecedented weakness against the greenback, and energy prices continue to soar. This confluence of factors could prove detrimental to the recovery and growth of consumption spending in Japan, which goes against the single most important thing that Japan and the BOJ have been attempting to do

Figure 10: Japanese Trade Imports (%)



Source: Bloomberg.com

Figure 11: Balance of Trades

Source: Tradingeconomics.com, Ministry of Finance

through their years of aggressive quantitative easing – to spur consumption spending and revitalize the economy. Furthermore, we can rule out any adjustments to monetary policy since BOJ has doubled down on maintaining yield curve control. This leaves only fiscal stimulus as the only viable policy tool left at Japan's disposal, and it is exactly what they are planning to keep Japan afloat during this tumultuous period.

Japanese Prime Minister Fumio Kishida and his cabinet have been in the process of crafting a fresh stimulus package of over 1 trillion yen (USD 8.2 billion) to cushion the impact of surging input prices stemming from the Russian-Ukraine conflict, as well as the weak Yen. This package emphasizes support for sectors that are most deeply affected by the cost-increases in fuel and grain, such as the transportation, agriculture, and forestry industries, due to their heavy reliance on gasoline for engines and grain for livestock feed. Kishida and the LDP intend to fund this stimulus package using the 5.5 trillion yen reserve funds set aside in the fiscal 2022 budget. The framework for this stimulus will be developed by April. Over the short term, if executed well, we see this stimulus package aptly supporting households and corporations in need in this period where inflation rages on and the BOJ continues to keep a lid on bond yields. However, the intention of this stimulus is to simply help the Japanese get by. It is a temporary, firefighting measure to mitigate the consequences that have surfaced from their own policy decisions. Because it does not serve as the foundation for economic growth, nor does it accompany a particularly significant engine for growth for the Japanese economy in this period, we do not see Japan's consumption spending levels showing any signs of life as a result of this stimulus.

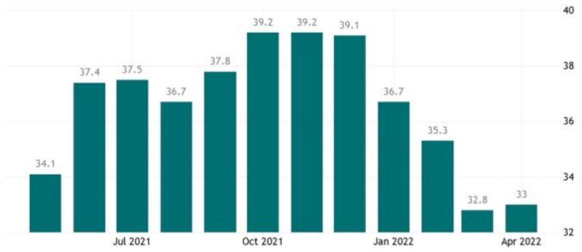
<u>Worsening Trade Balance</u>

The Japanese economy has been experiencing a streak of trade deficits over the past 8 months, partly fuelled by Yen weakness and further exacerbated by the impact of soaring energy prices from the Russian-Ukraine war. Exports of high technology products have been the engine of Japan's growth since the 60s, accounting for 19% of GDP. Unfortunately, export growth has been shaky. Despite a stronger expansion of semiconductor shipments to bolster export gains, the significant drag in auto shipments muted the pace of these gains.

The country's major auto manufacturers like Toyota Motor Corp. have paused production at a significant number of its plants as they struggle to procure parts from China, courtesy of the draconian measures adopted by Shanghai to curb the spread of COVID-19. In May, Toyota announced that it would reduce global production by about 30,000 units, and that if the lockdown in China is extended, this number could very well balloon. As it stands, 20 assembly lines at 12 of the 14 production plants in Japan are at a complete standstill. Other auto manufacturers like Suzuki Motor Corp. and Mazda Motor Corp. are also feeling the strain from this supply chain chaos, which seriously impedes export growth.

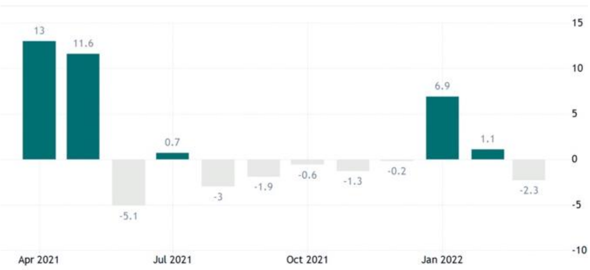
Referencing Fig. 10, imports jumped 31.2% yoy on higher energy prices, continuing on its upward march since the pandemic slump. On the other hand, exports grew 14.7% yoy, representing a 1.7% gain from the previous month. With imports growing at a much faster pace than exports, Japan posted a trade deficit of 412.4 billion yen in March (Fig. 11). And although this deficit had narrowed from the 2 trillion

Figure 12: Japan Consumer Confidence



Source: Tradingeconomics.com, Cabinet Office Japan

Figure 13: Japan Household Spending



Source: Tradingeconomics.com, Ministry of Internal Affairs & Communications

and 669.6 billion yen deficits in January and February respectively, it remains a concern as this could very well be a contributory factor to the weakness of the Yen due to increased selling of the currency.

For the aforementioned reasons, we believe that exports cannot gain a convincing foothold as a growth driver, at least for the year ahead. Japan's exports have shown to be incredibly susceptible to risk in major markets. The situation in China and Russia have weighed on exports while simultaneously inflated imports, where the value of shipments to China sharply cooled to 2.9% from 25.8% in February alone. For now, exports to the U.S rose 23.8% and exports to Europe rose 16.8%. But as more central banks around the world cool off on their easy money policies, those interest rate hikes could very well cool global demand as well. Hence, given how Japan is the 5th largest importer in the world, we do not see it outweighing imports in this environment and we do not see it having any significant impact on the economic growth of this fragile economy. The existing trade deficit will continue to persist for as long as the virus riddles China, and as long as input prices remain sky high amidst shaky demand.

<u>Reopening the Economy</u>

As of late March 2022, Japan has moved on from the various COVID-19 management measures that previously weighed on economic and social activities. As it stands, over half of the population has received their vaccine booster shots, with 86.9% of those aged 65 and above vaccinated. Furthermore, Japan's consumer confidence index recently edged up to 33.0 in April, slightly up from the 14-month low of 32.8 in March (Fig. 12). We believe that this improvement is a reflection of increased vaccination rates and the emergence from the quasi-state of emergency due to decreased infections, but it is too early to say that April will be a turning point for consumer confidence and therefore consumption spending heading forward.

The economy has teetered between expansion and shrinkage throughout 2021, most recently posting a 1.1% growth in 2021Q4. Growth in Japan has been uninspiring, not just in this pandemic period, but for the past decade. To further complicate Japan's growth trajectory, inflation and inflation expectations are on the rise. From Fig. 13, household spending in March saw a 2.3% drop for the first time in three months, perhaps indicative of caution exercised by households in the absence of COVID-19 curbs but amidst rising living costs. As these higher prices inevitably trickle down from companies to consumers in the following months, it is crucial to observe the changes in consumer behaviour. After all, this is a population that has grown accustomed to deflation. It is still too early to gauge if the reopening of the economy will outweigh the hindrance to consumption spending caused by inflation.

Additionally, Japan has expressed their intentions to gradually open up their international borders. In May, they will begin experimenting with small groups of tourists, strictly on tours chaperoned by travel agency staff. This group of tourists include those from the US, Singapore, Thailand, and Australia who have received three vaccination shots and have medical insurance. In June, Japan will permit 20000 overseas arrivals daily as part of this project. While tourism is a crucial part in kickstarting the economic growth engine, this plan is still in its infancy and could very well backfire if things start to go south. After all, more than half of the Japanese population has expressed their displeasure with the plan to reopen the country for tourism and are in favour of strict border controls. With an upper house election due in late July, Prime Minister Kishida can be expected to appease the public's expectations. We see the opening of international borders having an insignificant impact on economic growth for now.

All for One, not One for All – Policies for the Future

Economic Security Package

In recent years, Japan has begun to place heavy emphasis on economic security policies. October 2021 saw newly appointed Prime Minister Kishida create a new cabinet-level minister for economic security. Economic security for Japan has become even greater of a priority against the backdrop of geopolitical tensions that have materialised and are brewing, most notably in Russia's invasion of Ukraine, China flexing its muscles, as well as instability in the Indo-Pacific region.

In May 2022, the Japanese parliament passed an economic security bill to safeguard sensitive technologies and galvanize critical supply chains. This would entail tighter oversight of Japanese firms working in sensitive sectors and on critical infrastructure. These measures are primarily aimed at China, who Japan is very dependent on for growth, going in tandem with the restrictions that the US has imposed on technology imports from China, amidst growing tensions in Beijing.

We see this as a good step forward for the Japanese in establishing a more diversified and robust growth engine, considering its susceptibility to geopolitical tensions globally.

Figure 14: Long USDJPY

Source: Tradingview

Trade Idea – Long USDJPY

The Bank of Japan and Kishida's government have made their alignment of economic policies for the foreseeable future very clear; that is to maintain yield curve control. This means that for the foreseeable future, with Governor Kuroda at the helm of the BOJ till April 2023, the Yen will continue to depreciate against currencies of countries raising their interest rates. The most prominent of these will be the USD, and therefore we propose to open a long USDJPY position to capitalise on these movements.

From the chart, it appears that the price is consolidating, bouncing within a narrow range bounded by a straight-line support at 129.222 and a straight-line resistance at 130.718 that were formed since mid-April 2022. With an investment horizon of approximately one year, it is ideal to enter at a level slightly above the resistance and current price, at 131.0, to confirm a breakout and a continuation of the longer term uptrend of the currency pair. To support this thesis, we use the Elder Force Index which, at this point, is showing signs of a reversal to positive levels. This reinforces that prices will continue to rise. Simultaneously, we employ the aid of the Relative Strength Index, which is a momentum indicator that currently reflects that the level of buying still exceeds the downward pressure from selling. Given the dominant narrative surrounding Japan and BOJ's policy play in contrast to the Federal Reserve, we believe that this upward price action will continue hiking up and could even test the 150 threshold. However, as a conservative estimate and in line with the channel that has been identified in the chart, we have set a take profit at 140 to harness a 6.87% return over 2022. Our stop loss will be at 126.89, which is slightly below another resistance level that was identified. This trade yields a Risk/Reward of 2.19

Entry: 131.00
Take Profit: 140.00
Stop Loss: 126.89
Risk Reward Ratio: 2.19

NUS INVESTMENT SOCIETY

Global Macro Department –South Korea (UNDERWEIGHT)

Date: 19th May 2022

Analyst

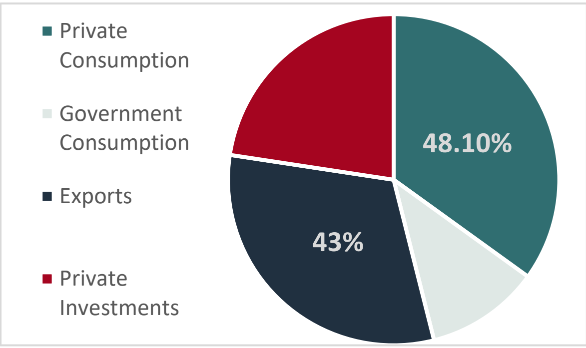
Jonathan Audie Widjaja
Global Macro Analyst
Jonathan.widjaja@u.nus.edu

Basic Information

Real GDP (US$)	1.631T
Real GDP Growth Rate (Q1)	3.1%
Core CPI (Apr)	106.85
PPI (Mar)	116.46
Con. Confidence (Apr)	103.8
KOSPI	2620.44

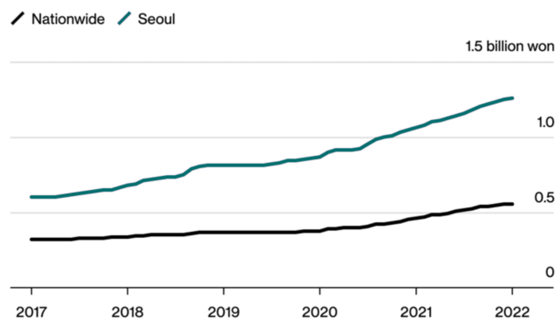
Chart info

Figure 1: Breakdown of GDP by Component



Source: FT.com

Figure 2: Real Estate Prices in South Korea



Source: Kookmin Bank, South Korea

Overview of South Korea

The Great Asian Tiger

As Asia's 4th largest economy and 10th largest in the world, South Korea has come a long way since its transformation from an underdeveloped, agrarian economy into an industrial powerhouse that boasts a highly skilled labour force. Her economic growth has been described as the "Miracle on the Han River", where South Korea still remains as one of the fastest growing developed countries in the world. From Fig. 1, by component, private consumption makes up 48.1% of GDP, followed by Exports at 43.1%, Investments at 31.1%, and Government Consumption at 15.3%. By sector, South Korea is a fairly mixed economy with 57% of GDP in the Service sector, with 32.8% and 1.7% in the Industrial and Agriculture sectors respectively.

An Export-Reliant Economy

South Korea is an extremely export reliant economy, with total exports of goods and services accounting for almost 50% of its GDP. In fact, robust exports have been the key driver in its recovery through the pandemic. To grasp the weight that exports have on South Korea's GDP, when their exports tumbled by 10.3% in 2019 due to trade frictions between China-U.S., Japan's restrictions on their chips, Brexit, as well as the Hong Kong protests, their GDP tumbled very noticeably as well, hitting a 10-year low.

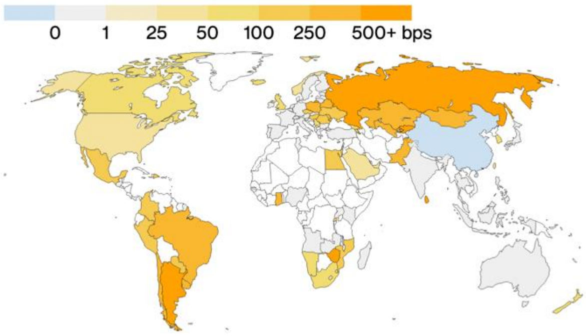
Summary of Events in The Past 6 Months

- The month of May saw the appointment of former prosecutor and lawyer, Yoon suk-yeol as South Korea's 13th president. Taking over the helm from President Moon, Yoon's presidency represents a hawkish tilt in favour of more capitalist policies that leave the economy to the market's hand. We can expect a greater focus on pro-business deregulation in the form of ending capital gains tax and lower corporate taxes.

- Inflation in South Korea remains hovering at 13-year highs with no signs of slowing in the near term. As Asia's fourth-largest economy struggles with surges in consumer prices, its post-pandemic recovery trajectory heading into 2022 appears to be rife with challenges.

- The inflation observed as a consequence of the Russia-Ukraine conflict and supply chain disruptions are not the only economic headwinds challenging South Korea's economy. As seen in Fig. 2, home prices have been on an upward march, with those in Seoul more than doubling. Unresolved during President Moon's term,

Figure 3: Interest Rate Hikes Globally



Source: Bloomberg.com

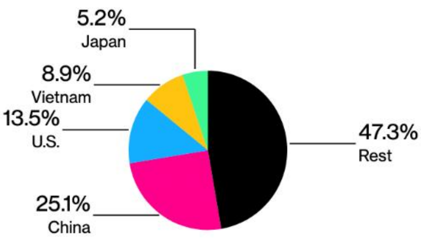
newly appointed President Yoon is tasked with the responsibility of making housing more affordable through supply measures.

- The wave of monetary policy tightening continues across the globe (see Fig. 3). The Bank of Korea, in line with the majority of central banks across the globe, has continued raising interest rates. In April, BOK raised their base rates by 25 basis points to 1.50%. This was a decision made prior to the appointment of their new governor, director of the IMF's Asia and Pacific Department, Rhee Chang-yong. Governor Rhee is set to chair his first BOK policy meeting in May as the central bank considers the possibility of larger increment rate hikes to curb inflation.

- Extended lockdowns in China have stifled economic activity, which in turn continue to send ripples throughout global supply chains. South Korea is one of the countries hit hardest by the slowdown in China, since 25.1% of its exports by value go to Beijing (see Fig. 4). Together with the States, they make up more than a third of S. Korea's exports.

- The Won is testing the 1,300 won per dollar barrier. Having slid almost 8% against the greenback makes the Won one of Asia's worst performing currencies this year. Downward pressure on the Won is expected to ensure, considering the surging input costs and slowing demand from China's lockdowns.

Figure 4: South Korean Export Breakdown



Source: Bloomberg.com

- The arms race in Asia is heating up as South Korea has been making advancements in military missile capabilities as well as their space program, of which they recently launched their home-developed Nuri rocket. Plans to develop a nuclear arms program are not beyond the realm of possibility, and doing so may escalate existing tensions within the region, especially with the North and with China.

- As one of Washington's staunchest allies in the region, President Yoon is expected to engage more closely with President Biden with regards to the Indo-Pacific Strategy. Given President Yoon's explicit lambasting of China, and his forward-leaning stance on alliance collaboration, we can expect greater Korean support as these advanced economies group up to create a secure and resilient region that sees China as a threat.

For The People – Heading Into the Future

Yoon's Appointment as President

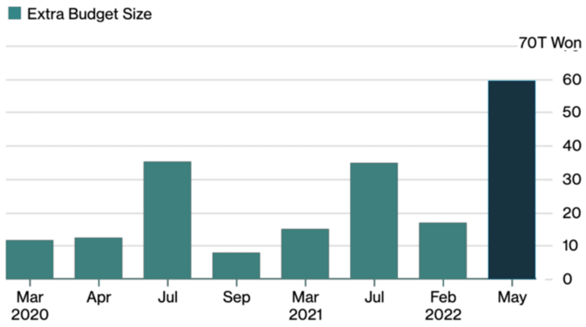
After a very closely fought election, the beginning of May saw South Korea formally usher in former public prosecutor and lawyer Yoon Suk-yeol as their 13th president. His inauguration into office comes at a tumultuous time, amidst a shaky recovery from the pandemic and a heated housing market that has given his victory historically low approval ratings. Having had no prior political or foreign policy experience, many question President Yoon's ability and competence in navigating the geopolitical flux surrounding his nation in this period of time.

To put forth a strong signal of the change that is to come, one of President Yoon's first moves was to shift the presidential office away from the historic Blue House, situated in the north of Seoul, to a Defence Ministry complex in the Yongsan district, which is an underdeveloped neighbourhood best known for its U.S. military presence. As he opens the Blue House up to the public, shifting the centre of power out of the central Seoul location that had been the seat of government for 6 centuries could significantly reshape the 600-year-old capital politically and economically. He had previously blasted the Blue House as a "symbol of imperial power", and therefore justified this surprising relocation under the grounds of presenting a more democratic presidency to the public. In addition to that, he had also cited security and logistical reasons for the move; especially since the Defence Ministry complex houses a military bunker. The current location has had a history of housing U.S. forces since the end of World War 2. This could signal Korea's allegiance to America and their commitment to cooperate in matters involving both China and North Korea.

The conservative President Yoon's inauguration signals a hawkish turn in South Korean politics. His election campaign spelled a focus on policies aimed to support a "private sector-led" economy, where he vowed to promote growth and boost employment in the world's 10th largest economy. Yoon's private sector approach is in stark contrast to his opponent Lee Jae-myung's proposition of having South Korea pay a universal basic income. Yoon's conviction to shift the economy away from government bureaucracy in favour of the market's hand comes at a time where wages have failed to keep up with skyrocketing housing prices, especially in urban centers like Seoul. Another commitment that President Yoon would have to fulfil is his promise to narrow income disparity and implement a 100-day emergency rescue plan, which pre-empts prompt and hefty financial injection into the beaten-down economy. Yet, he had pledged to shut down the Gender Equality Ministry despite the country already having one of the largest gender-based pay gaps amongst developed economies. This is reflective of the capitalist leadership approach that South Korea will now be led under.

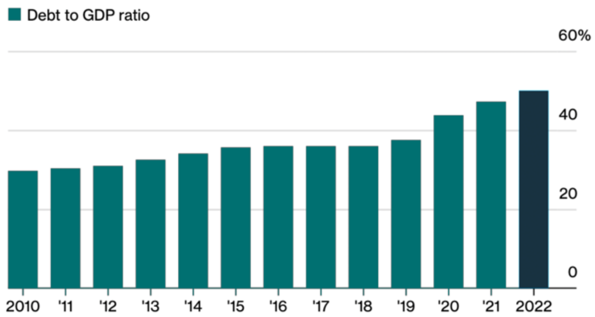
When it comes to foreign policy and the handling of geopolitical tensions, Yoon has come to power at a time where illegal and unreasonable provocations have become more frequent in the North. While keeping the doors for peace and negotiation open, Yoon had explicitly backed a pre-emptive strike if Pyongyang were to pose an immediate threat to their peace. The denuclearisation of North Korea is still a priority, but it appears that the chilled ties between the South and North had already materialised in the deployment of a U.S-made

Figure 5: South Korea's Largest Extra Budget



Source: Bloomberg.com

Figure 6: South Korea's Growing Debt



Source: Bloomberg.com

missile interceptor system known as THAAD. This is in contrast with what previous president Moon did, as improving relations with North Korea was central to his presidency and sometimes prompted discontent with Washington. The same goes for China, since Yoon seeks the rebirth of South Korea as a prosperous, peaceful, and free country. Hence, we fully expect to see a tougher rhetorical line on their adversaries. This may come in the form of a stronger U.S Korea security alliance, more military exercises, and greater defence spending to shore up military capacity. But despite the hostile undertones towards China and North Korea, Yoon did express interest to rekindle their relationship with Japan. This comes after a bitter trade war in 2019 that was aggravated by disputes over Japan's colonial occupation of the Korean Peninsula back in 1910-1945. He cited adopting a "forward-looking perspective" for their youth and future generations, and to focus on the future, not the past. It remains unclear how Yoon intends to navigate this intricate web of geopolitical complexities, and only time will tell if his lack of prior experience will provide fresh perspectives and solutions, or if it will sour relations further. As it stands currently, his signals point towards souring an already fractious relationship with China, which may be detrimental to the export-dependent economy since China is their largest export market.

South Korea's Largest Ever Extra Budget

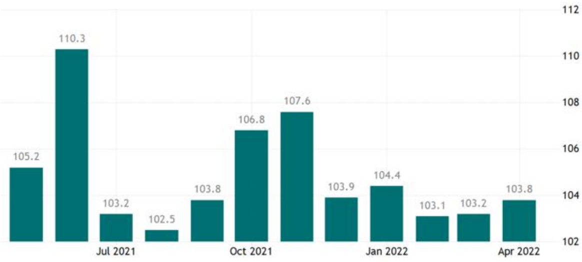
Most recently, Yoon announced South Korea's largest ever extra budget (see Fig. 5) in a bid to mitigate the domestic and international headwinds caused by the pandemic. The Finance Ministry has expressed that the 59.4 trillion won proposal will be broken down to include approximately 26 trillion for small businesses, 6 trillion for pandemic workers, and 3.1 trillion won for subsidies to households hit hardest by consumer price hikes. The velocity and scale of such a package comes as no surprise, given how both the newly sworn in president and finance minister have shared the common view that South Korea's utmost priority is to combat rising inflation. It is worth noting that South Korea's debt-to-GDP has decreased slightly to 49.6% from 50.1%, spelling a positive sign for an economy that has relied on numerous economic packages to mitigate the effects of the pandemic over the past two years. A gradual reduction in its debt load sets a good foundation for future growth. For now, as seen in Fig. 6, their pandemic-fuelled debt is still on an uptrend.

Room For Growth – A Post-Pandemic World

Back Home

Perhaps more so than their other peers in advanced economies, South Korea has posted upbeat and healthy growth figures even amidst the resurgence of COVID-19 in the delta and Omicron variants. This robust recovery trajectory has been supported by accelerated and thorough vaccination programmes, of which 88% of its population of 52 million people have already been inoculated, with 64% receiving a booster dose. Furthermore, the government has taken major steps in ensuring a full-fledged return to normalcy by removing all pandemic-related restrictions like limits on gatherings, midnight curfews for restaurants and bars, as well as all social distancing curbs, with the exception of mask-wearing mandates.

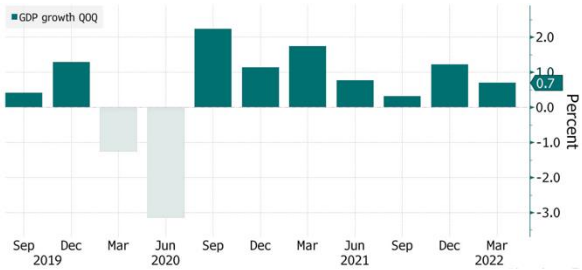
Figure 7: Consumer Sentiment Index



Source: Tradingeconomics.com, Bank of Korea

Firstly, let's discuss consumption spending which constitutes 48.1% of their economy's total gross domestic product. From Fig. 7, the Composite Consumer Sentiment Index has remained modest, averaging 103.6 over the year. Most recently, this figure has edged up 0.6 points to 103.8 in April 2022, and this higher reading is reflective of the aforementioned relaxation of pandemic-related restrictions. Even though this marks the 14th consecutive month in which the figure has stayed above the 100-threshold to indicate healthy and sustained optimism, we believe that despite the government's policies to usher the economy into the post-pandemic era, the raging inflationary pressures are still applying downward pressure on consumer and business confidence. This is evident from the GDP figures posted in the first quarter of 2022. But even as the population is displaying a willingness to put the virus behind them, the economy as a whole, and household spending in particular, is being held back by surging commodity prices courtesy of inflation. We see this as South Korea's growth decelerated, moderating in its pace following the breakout of the Omicron variant in 2022Q1. From Fig. 8, we see a 0.7% quarterly growth compared to the 1.2% growth that was observed in 2021Q4. Still, the economy grew 3.1% annually, down from 4.2% in the previous quarter (see Fig. 9).

Figure 8: QoQ GDP Growth



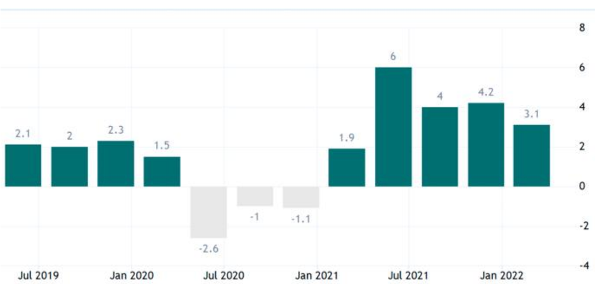
Source: Bloomberg.com, Bank of Korea

When it comes to household consumption, there are various headwinds that may continue to hinder its recovery. Firstly and most obviously, raging inflation despite several rates hikes have households grappling with higher consumer prices. These first surfaced as a consequence of supply chain disruptions during the pandemic, and have been further exacerbated by the ongoing war in Eastern Europe. It will be difficult for consumption spending to show strength amidst this backdrop of uncertainty with regards to the severity and duration of inflationary pressures. While consumption does appear to be picking up from mid-March due to the resumption of economic activities domestically and a sharp decrease in virus cases, we see it being bogged down by the higher energy and commodity costs and we are unable to say with certainty when these restrictive circumstances will abate. Therefore, we are cautious in the assessment of consumption spending as an engine of growth in the near term. As seen from Fig.10, private consumption saw a 0.5% decrease quarter on quarter, but a 5% increase yoy.

Cracks in Export-Led Growth

South Korea's primary exports include autos, electronic products, machinery, and ships. They are an export-reliant economy built on the backbone of huge family-owned conglomerates called chaebols, in the form of Samsung, SK Group, and Hyundai who at one point produced about two thirds of South Korea's exports and attracted a significant portion of the country's foreign capital inflows that gave it the boost it needed to transform into the technological powerhouse it is today. However, the pandemic has unveiled some cracks in South Korea's reliance on exports for sustained growth.

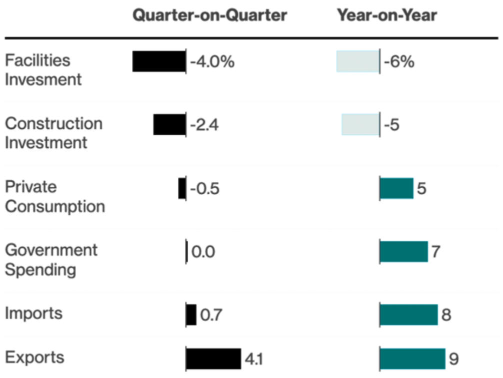
Figure 9: Annualized GDP Growth



Source: tradingeconomics.com, Bank of Korea

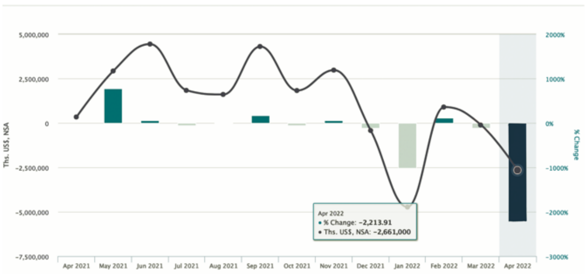
South Korea's economic recovery in the pandemic-era has been spearheaded by very strong trade performance, which gave it the cushion it needed to explore policy tools to manage financial risks. However, in contrast to the consistent trade surpluses that we saw South Korea enjoy throughout 2021, these surpluses have waned as they have posted incredibly weak export performance relative to imports since December 2021. As seen from Fig. 11, in 2022 alone, they

Figure 10: Growth of GDP Components



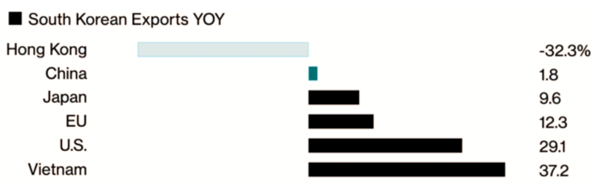
Source: Kookmin Bank. Bank of Korea, Bloomberg

Figure 11: Declining Balance of Trade



Source: Bank of Korea, Bloomberg

Figure 12: South Korean Exports



Source: Bank of Korea, Bloomberg

have posted 3 months of trade deficits, with the one in April equating to USD 2.66 billion. This was a consequence of imports growing by 18.6% yoy to USD 60.35 billion while exports grew at a softer 12.6% yoy to USD 57.69 billion. There are two primary reasons for the erasure of their trade surplus. Firstly, rising global commodity and energy prices have caused the inevitable exponential rise of imports, something that South Korea is not immune to. Secondly, demand from China has been incredibly weak due to their response to the pandemic. As the world has adapted to live with the virus, building herd immunity through high inoculation rates and easy management measures, China have adopted a more draconian approach to their pandemic management. At the time of writing, China have been under an incredibly strict extended lockdown that has completely immobilized economic activity and sent shockwaves through global supply chains. This has proven to be detrimental to South Korea, given how China is their largest trade partner by volume and value (25% of their exports by value go to China). Exports saw a 9.11% drop from March to April, and this is even with strong demand from the U.S., Europe, and Vietnam (see Fig. 12).

We anticipate that the standstill in China will fully manifest into complications for South Korea's economic growth in the coming months, especially with the uncertainty from the war in Europe weighing in. South Korean trade data serves as an early indicator of global economic activity as its manufacturers are positioned widely across supply chains. Their exposure to supply chains and domestic demand from mainland China is too significant to offset with simple stimulus measures or increased private consumption back at home. Even though managing inflation is positioned as the top priority for the Bank of Korea and President Yoon, growth prospects given the current circumstances should also be a focal point as it will dictate the pace of interest rate hikes. With the hawkish tone from South Korea's leaders, we anticipate that economic slowdown is imminent and inevitable

Up Up and Away – The Effects of Inflation

Inflation Rages On

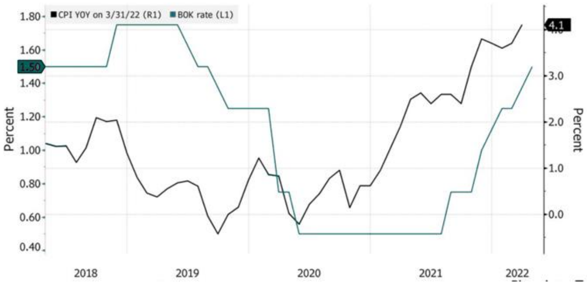
Inflation has been a hot topic across the globe, and South Korea has not been spared from its wrath. From Fig. 13, consumer prices in April rose at a faster than expected rate of 4.8%, representing a 4.1% increase from March and far exceeding analyst estimates. This data reflects the fastest annual growth in 13 years, since October 2008. It is also the 13th month in which inflation has exceeded the BOK's inflation mandate of 2%. Core inflation, which excludes energy and food, also increased modestly to 3.6% yoy in April, up from 2.9% in March, marking the highest reading since May 2009. With that, South Korea is seeing inflation average 3.28% over the past 12 months. A survey by the BOK has shown that inflation expectations are at a 9-year high of 3.1% over the next 12 months and that consumers fully expect more rate hikes incoming.

We expect these figures to inflate over the coming months as demand-side factors begin to contribute to inflation. Currently, what we are seeing is mainly the consequence of supply-side components like the disruptions in China and rising commodity prices. But as the economy reopens, increased levels of domestic demand for goods and services will start contributing to overall inflation as well. This creates a tricky environment to navigate for South Korea. On one hand, it has

Figure 13: S.Korea CPI YoY

Source: Bloomberg.com, Bank of Korea

Figure 14: BOK's Rate Hikes



Source: Bloomberg.com

committed policy tools to combatting inflation. Apart from rate hikes, the government has also recently expanded tax cuts on oil products from 20% to 30% for 3 months to reduce the impact of soaring energy prices. On the other hand, making full use of such policy tools will risk stifling private consumption and hence hinder their economic growth. Furthermore, the country is already dealing with less-than-ideal growth prospects heading forward due to slowing global demand and supply chain hiccups, thanks to China's total lockdown. It is a balancing act that BOK will have to navigate very carefully, lest they lead the economy into a recession with the tightening of their policy in a slow and low growth landscape. We do believe that such a possibility will not deter BOK from bigger and bolder rate hikes, for President Yoon and Governor Rhee have expressed a joint priority in taming inflation.

Bank of Korea's Stance

The Bank of Korea (BOK) has displayed timeliness and flexibility in its utilisation of monetary policy to influence the economy when circumstances necessitate intervention. Back in August 2021, it was the first major developed economy to hike interest rates in the pandemic era, from 0.5% to 0.75%.

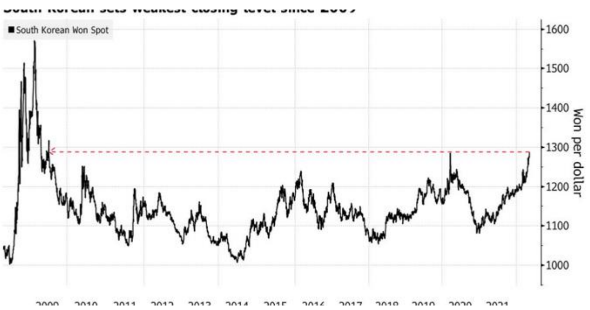
As inflation continues to ravage the globe, BOK has remained steadfast with regards to the pivot that they've made towards policy normalisation, having been explicitly hawkish in all of their press statements. Most recently in April, BOK raised its benchmark (7-day) interest rate by 25 basis points up to 1.50% in their first ever decision without a governor in place. From Fig. 14, this rate hike marks the fourth increase in the central bank's base rate since the start of their policy tightening cycle in 2021Q3. Still, South Korea grapples with soaring household debt, asset-price bubbles, and long-withstanding inflationary pressures now exacerbated by the Russia-Ukraine conflict. Even so, inflationary pressures appear to be accelerating full steam ahead.

Considering the weakening economic growth prospects surrounding South Korea, we believe that it is quite possible that South Korea does away with the gradual 25 basis point rate hikes in favour of large-step interest rate increases, for example 50 basis points, at least in the coming months. After all, they are already hiking rates fairly frequently in relation to their peers. Initially, the rationale for tightening monetary policy was due to inflated asset prices from ultra-low rates. For example, real estate prices in metro regions like Seoul have more than doubled to cost more than 1 billion won. However, the priority now has shifted to keeping a lid on inflationary pressures. If they were to proceed with these larger rate hikes, we could see government bonds boom as they price in the larger-increment rate hikes. Stock prices could very well tumble as well as the economic outlook turns bleak in the near term. This will all unfold on May 26th when newly appointed BOK Governor Rhee Chang-yong chairs his first policy meeting.

Weakening Won

Aside from the downward pressure that inflation expectations and rate hikes have had on growth, the Won has also taken quite the significant beating this year. In May, it closed at the weakest level in more than a decade since July 2009, which was when the country was

Figure 15: USD/KRW Movement



Source: Bloomberg.com

still recovering from the global financial crisis of 08. As seen from Fig. 15, it currently stands at just under 1300 won per dollar.

Just this year alone, the won has weakened 7.6% against the greenback. We see this downward slide for the won continuing for as long as long as energy prices stay elevated, since South Korea is so reliant on importing energy. Another factor to consider is the prolonged lockdowns in China that have immobilized economic activity from their largest trading partner.

Figure 16: Short KOSPI

Source: Tradingview

Trade Idea – Short KOSPI

Given the turbulent backdrop of growing inflation, we can expect South Korea to proceed full steam ahead with their tightening of monetary policy, ramping up their adjustments in terms of frequency and magnitude. Doing so will significantly impact the amount of capital inflows and liquidity into financial markets. In considering the KOSPI, it is worth noting that its constituents are very tech heavy, boasting companies like Samsung, Naver, and Kakao. Inflationary environments typically do not see the tech sector outperforming. Furthermore, with inflation potentially eating at corporate profits and global demand weakening due to the wave of policy tightening, we can expect outflows from the KOSPI, allowing it to resume its downward trend in the near future.

As observed from the chart, the price movement has consistently shown that the currency is bounded in a predictable downward movement, making lower lows and lower highs as demarcated by the trend lines that it has been ranging within since the start of 2022. The MACD indicator not only shows how the MACD and signal line are beginning to converge, which may be a sign of imminent bearish reversal. This corresponds to the price action as well as the movement on the RSI, which shows that despite the price rising currently, there isn't much buying pressure as the strength is struggling to match the levels previously hit during the previous price peak. It indicates that the price movement is due for reversal as there is more downward pressure on the price, Lastly, the Bollinger bands point towards a bearish turn as well as the price tests the upper limits of the bands.

Therefore, we believe that it is profitable to open a short position at 2635.3454, priced slightly above the current price. We will take profit at 2500 as guided by the downward trend, with stop loss placed at 2673.32 which is just above the current resistance level, just in case it breaks out of the downtrend. This trade has a risk/reward ratio of 3.56, yielding a profit of 3.56%

Entry: 2635.3454
Take Profit: 2500.00
Stop Loss: 2673.32
Risk Reward Ratio: 3.56

Disclaimer