STRATEGY

Regional

ASEAN X Macro

Assessing FX Interventions and Reserve Adequacy

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USD Resilience and Its Ramifications

It has been a rather mixed year for the USD. At the start of 2023, many had expected a gradual decline of the USD against Asian currencies based on the belief that China's reopening from Covid restrictions could benefit the region. While the USD did initially decline, a lackluster recovery in China and a higher for longer narrative for the US rates have sort of led to a tale of two halves with the USD trading firmer than initially expected especially in the second half of 2023. In recent weeks and months, Asian and emerging market currencies have been under pressure from this narrative.

FX Interventions and Reserve Adequacy

As such, regional central banks have relied on FX interventions or "leaning against the wind activity" to reduce unwelcome volatility in their currencies. In this piece, we delve into the various intervention measures taken and look at reserve adequacy in each country. From the start of the year, Thailand (-6.6%) saw the largest percentage decline in reserves and Singapore saw a rise (+16.8%) in reserves. We do note that the reserves data does include valuation effects on foreign currency assets and other factors such as transfers or investment gains and losses. The impact of other means of intervention, such as jawboning or moral suasion by the central banks would also not show up in the foreign reserves.

We found that coupled with the existing monetary policies, the impact from explicit central bank intervention for Malaysia and Indonesia on their currencies looks somewhat limited, while Philippines used comments from central bank officials (jawboning) and central bank policy action to support their currency by preventing the yield differential from widening. Singapore has increased its reserves in a period where the SGDNEER faces upward pressures, while India chooses to keep the rupee stable. China was able to keep CNY arguably pegged to the USD at 7.30 for a few weeks, resulting in trade-weighted appreciation. That said, the pressure on the CNY stems not just from yield differentials with the USD but also due to its economic malaise. As the USD turns lower, PBoC may ease up on its grip on CNY. CNY is thus likely to underperform on a trade-weighted basis.

Conclusion

In conclusion, over the next 6- 12 months, regional central banks appear to still have sufficient reserves based on the ratio of reserves to imports/short term debt/GDP, to stem any short-term capital outflows that could cause unwelcome volatility in their currencies. These ratios are suggested by the IMF and central banks as measure of reserve adequacy. However, we would also like to reiterate our current broad view that we expect the USD to gradually decline closer to the end of 2024. If this should come to fruition, then the idea of reserves adequacy could be moot as regional central banks could take the chance to accumulate reserves instead. Additionally, for central banks that would prefer to conserve their reserves, other measures to manage capital outflows do exist.

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Macro Views

ASEAN-6 Key Macroeconomic Indicators

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	Real GDP growth (%)					Headline Inflation (%, average)					Policy Rate (%, year-end)				
	2020	2021	2022	2023E	2024E	2020	2021	2022	2023E	2024E	2020	2021	2022	2023E	2024E
Global	(3.0)	6.3	3.5	3.3	2.9	3.2	4.7	8.7	6.8	4.8			-		
US	(2.8)	5.8	1.9	2.2	1.0	1.2	4.7	8.0	4.1	2.6	0.125	0.125	4.375	5.375	4.625
China	2.5	8.5	3.0	5.2	4.4	2.5	0.9	2.0	0.3	1.1	3.85	3.80	3.65	3.30	3.30
Indonesia	(2.1)	3.7	5.3	5.0	5.2	2.0	1.6	4.2	3.7	3.0	3.75	3.50	5.50	6.25	5.50
Malaysia	(5.5)	3.1	8.7	4.0	4.4	(1.2)	2.5	3.3	3.0	3.0	1.75	1.75	2.75	3.00	3.00
Philippines	(9.5)	5.7	7.6	5.8	6.5	2.4	3.9	5.8	6.0	3.5	2.00	2.00	5.50	6.50	5.75
Singapore	(3.9)	8.9	3.6	0.8	2.2	(0.2)	2.3	6.2	4.8	3.3	0.13	0.19	3.10	3.80	3.20
Thailand	-6.2	1.6	2.6	2.9	3.6	(0.8)	1.2	6.1	2.5	2.0	0.50	0.50	1.25	2.50	2.25
Vietnam	2.9	2.6	8.0	4.8	6.0	3.2	1.8	3.2	3.4	3.5	4.00	4.00	6.00	4.50	4.50
Cambodia	(3.1)	3.0	5.1	5.4	5.9	2.9	2.9	5.3	2.5	3.0	2.00	2.00	2.00	2.00	2.00

	Exports of Goods & Services (%)					Gross Fixed Capital Formation (%)					Private Consumption (%)				
	2020	2021	2022	2023E	2024E	2020	2021	2022	2023E	2024E	2020	2021	2022	2023E	2024E
Indonesia	(8.4)	18.0	16.3	4.5	8.5	(5.0)	3.8	3.9	4.0	6.0	(2.6)	2.0	4.9	4.6	5.2
Malaysia	(8.6)	15.4	14.5	(3.2)	3.4	(14.4)	(0.9)	6.8	5.5	5.1	(4.2)	1.9	11.2	4.7	4.8
Philippines	(16.1)	8.0	10.9	2.7	4.5	(27.3)	9.9	9.7	7.9	10.4	(8.0)	4.2	8.3	5.5	5.5
Singapore	0.4	11.7	(1.3)	(0.5)	1.8	(14.8)	18.0	1.6	(1.2)	2.0	(13.1)	6.6	9.7	3.8	2.5
Thailand	(19.7)	11.1	6.8	2.1	2.9	(4.8)	3.1	2.3	1.4	2.7	(0.8)	0.6	6.3	4.1	4.2
Vietnam	4.1	14.0	4.9	-2.6	5.8	4.1	3.7	6.0	5.3	7.2	0.4	2.0	7.8	3.1	5.3
Cambodia	(11.3)	13.5	20.7	0.9	8.5	(2.7)	6.8	20.0	5.4	7.0	(4.3)	(5.1)	16.7	5.0	6.0
China*	0.6	1.9	0.5	0.3	0.5	3.0	12.8	5.7	4.3	4.4	0.0	13.1	2.3	6.4	4.1

Note: Total consumption shown for Myanmar, as Myanmar does not provide breakdown of private & government consumption. Gross Capital Formation shown for Myanmar. Laos' real GDP data is provided with breakdown by industry. Data series on breakdown of real GDP by expenditure components was discontinued since 2017.

Source: CEIC, Maybank IBG Research

* Net Exports of Goods and Services for China is expressed in percentage point contribution.

USD vs. Major & Regional Currencies Forecast

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	Spot (as of 10 Nov 2023)	4Q23	1Q24	2Q24	3Q24	4Q24
DXY (Dollar Index)	105.866	106.43	106.14	104.68	103.40	101.56
Japanese Yen	151.42	150.00	150.00	145.00	140.00	136.00
Euro	1.0674	1.0550	1.0600	1.0700	1.0800	1.1000
Pounds Sterling	1.2221	1.2000	1.2000	1.2100	1.2200	1.2300
Australian Dollar	0.6359	0.6500	0.6500	0.6800	0.6800	0.7000
Renminbi	7.2924	7.25	7.25	7.20	7.20	7.20
Indian Rupee	83.3975	83.50	83.50	83.00	82.50	82.00
HK Dollar	7.8097	7.8	7.79	7.78	7.76	7.76
Taiwan Dollar	32.364	30.50	30.25	30.00	30.00	29.00
Korean Won	1316.9	1350	1350	1330	1300	1280
Singapore Dollar	1.3599	1.3650	1.3650	1.3550	1.35	1.34
Malaysian Ringgit	4.7075	4.70	4.70	4.60	4.50	4.40
Indonesian Rupiah	15695	15500	15500	15200	14800	14600.00
Thai Baht	35.865	36.00	36.00	33.50	32.50	32.00
Philippines Peso	55.955	57.00	57.00	56.50	55.50	54.50
Vietnamese Dong	24325	24500	24500	24200	24000	24000

Source: Bloomberg, Maybank FX Research & Strategy

Fixed Income: Government Bond Yield Forecast

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10-year Yield (%)	Outlook	Current (as of 10 Nov 2023)	4Q2023	1Q2024	2Q2024	3Q2024
China	Mildly Bullish	2.65	2.50	2.50	2.40	2.40
Indonesia	Neutral	6.77	6.50	6.25	6.00	6.25
Malaysia	Mildly Bullish	3.88	3.80	3.75	3.50	3.40
Philippines	Neutral	6.75	6.50	6.25	5.75	6.00
Singapore	Neutral	3.05	3.10	3.10	2.90	2.75
Thailand	Neutral	3.04	2.90	2.80	2.50	2.50
US	Bullish	4.63	3.90	3.90	3.50	3.25

Source: Bloomberg, Maybank IBG Research

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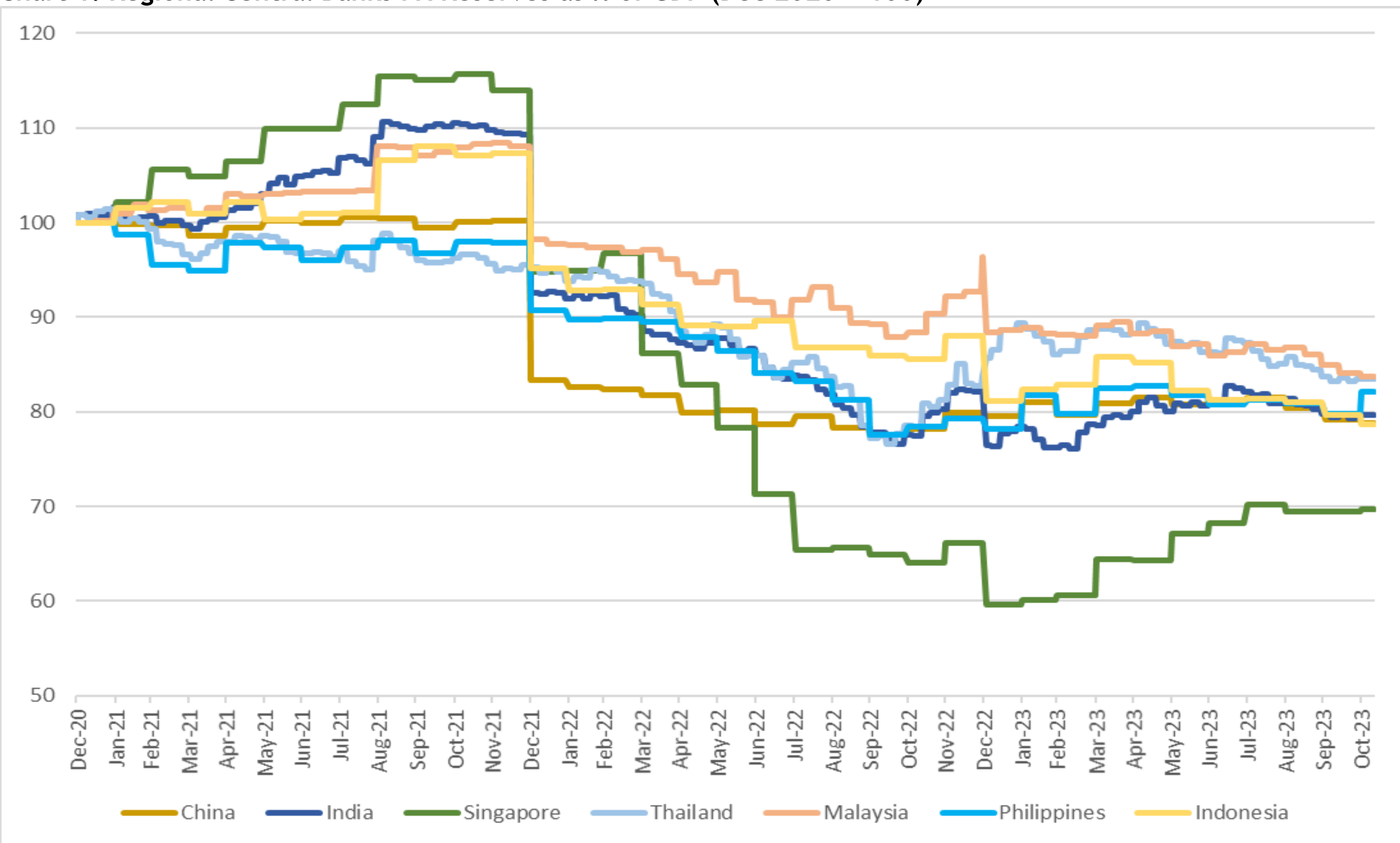
Assessing the Ammunitions of Central Banks For Future Storms

Since the Nov FOMC policy decision as well as the Oct NFP release, Asian currencies have enjoyed a breather. The higher-for-longer narrative had been a key driver of Asian currency weakness in the past several weeks and taken a pause after the latest policy meeting has revealed a more hesitant Fed committee followed by the softer Oct print. Admittedly, there are quite a number of warnings for UST bulls not to get ahead of themselves as the US economy remains resilient and Treasuries will still face supply-side pressure. The re-emergence of higher-for-longer theme could still occur. So in the face of less-than-benign external environment, regional central banks have been deploying tools to slow the depreciation pressure on their respective currencies. We look into what regional central banks have done this year and whether they have enough in the toolkit to face another rates-driven storm. The central banks that we chose to delve into are usually more interventionist and we explore them by country.

Chart 1: Regional Central Banks FX Reserves as % of GDP (Dec 2020 = 100)



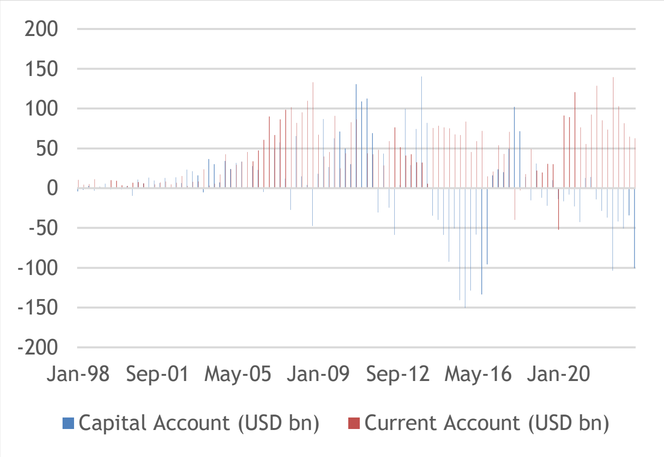
Source: Bloomberg, Maybank FX Research & Strategy
Note: Singapore transferred a total of S$237b of reserves to GIC in 2022, leading to the fall over time

We observe in Chart 1 that regional central banks reserves as a percentage of GDP have been on a broad decline since Dec 2020, with Singapore seeing the largest decline and Malaysia the smallest decline. Reserves as a percentage of GDP in India and China fell by about 20% since Dec 2020. The decline in Singapore's reserves was also due to several large transfers of reserves to its sovereign wealth fund for management over 2022 rather than an actual drawdown due to intervention to support its currency. In this piece, we examine the various tools that regional central banks have employed to mitigate undesired volatility in their currencies and suggest suitable trade recommendations based on our view of their currencies and intervention stances moving forward.

Looking at Developments in China (PBOC) and India (RBI)

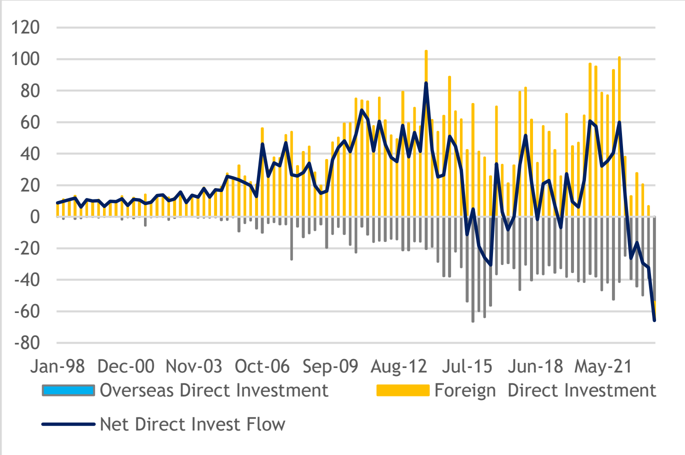
PBoC has been deploying a number of tools to keep the USDCNY stable around the 7.30-figure in order to prevent a downward spiral for the local currency for the past few months. **This is all the more pertinent given the surge in capital outflows observed even as China stepped up on its efforts to strengthen its economy, boost its equity markets as well as reduce the speculative pressure on its currency.**

Chart 2a: SAFE Flows Data Indicate Persistent Capital Deficit, Falling Current Account Surplus



Source: Bloomberg, Maybank FX Research & Strategy

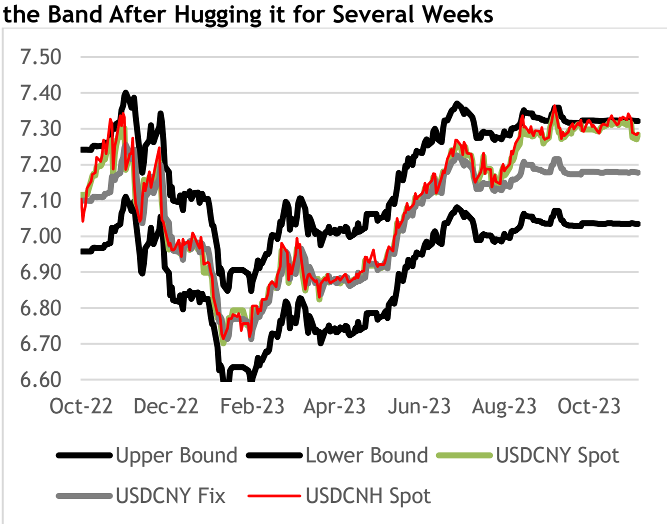
Chart 2b: FDI Turned Negative for the First Time



Source: Bloomberg, Maybank FX Research & Strategy

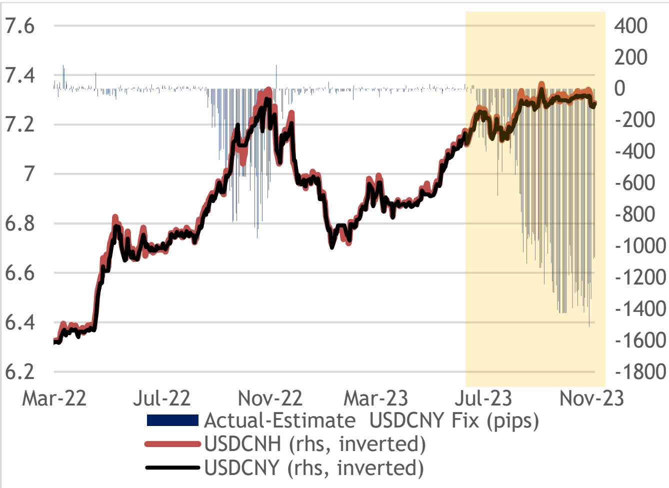
The most eye-catching detail of the balance of payment data from SAFE was perhaps the foreign direct investment that turned negative for 3Q for the first time in record (Chart 2b). Net direct investment has been on a net outflow for a while now overseas direct investment continues to rise while foreign direct investment has been on the decline. The net FDI of $11.8bn could be due to a potential outflow of corporate earnings (not helped the least by the unfavorable US-CH rate differential) or a lack of fresh foreign investment. This comes in the backdrop of companies diversifying their supply chains. Confidence in the President Xi's economic plans has been weakening, not helped the least by concerns on national security.

Chart 3a: USDCNY Spot Pulls Away from the Upper Bound of the Band After Hugging it for Several Weeks



Source: Bloomberg, Maybank FX Research & Strategy

Chart 3b: USDCNY Fix - USDCNY Spot Deviation Remains Wide Since Late Jun 2023



Source: Bloomberg, Maybank FX Research & Strategy

USDCNH used to be seen as a better gauge of yuan sentiment as it is not subjected to the limits of the trading band (Chart 3a). As a result, a widening USDCNH-USDCNY premium (Chart 3b) would be taken to be a gauge of depreciation pressure on the yuan. However, PBoC had been controlling offshore yuan liquidity by issuing offshore yuan bills.

Offshore state banks have also been keeping liquidity tight via OMOs. As a result, USDCNH-USDCNY spread is kept arguably artificially stable. This is done in order to slow the build-up of speculative pressure against the yuan. The central bank had repeatedly pledged to keep RMB stable. The most recent mention on the yuan would have to be by Pan Gongsheng.

"The central bank would safeguard against the overshooting of RMB and one-sided speculative pressure on the currency"

PBOC Deputy Governor
Pan Gongsheng, 8 Nov 2023

Chart 4a: CNH Liquidity Squeezed in times of Depreciation Pressure

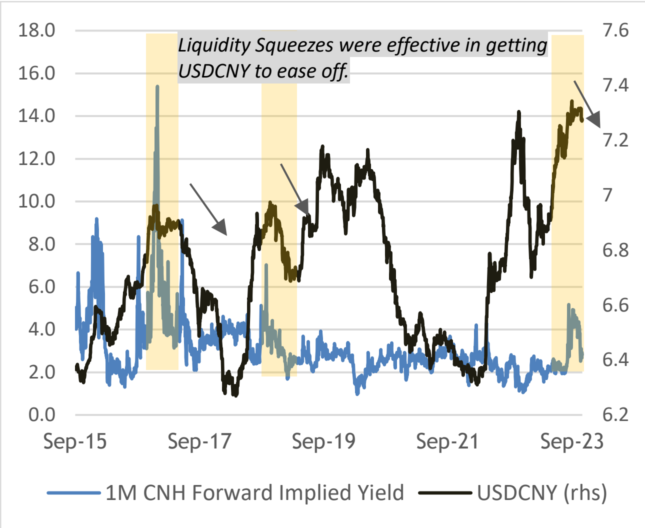
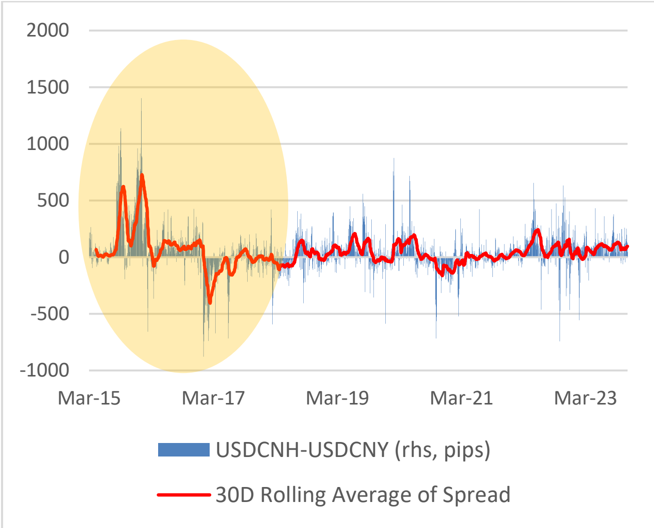


Chart 4b: So that USDCNH-USDCNY Spread is Kept Stable



Note: The yellow regions denote notable spikes in implied yield of 1M USDCNH forward.
Source: Bloomberg, Maybank FX Research & Strategy

Apart from these methods, the Chinese government has made used of the following tools this year and in the past (Table 1).

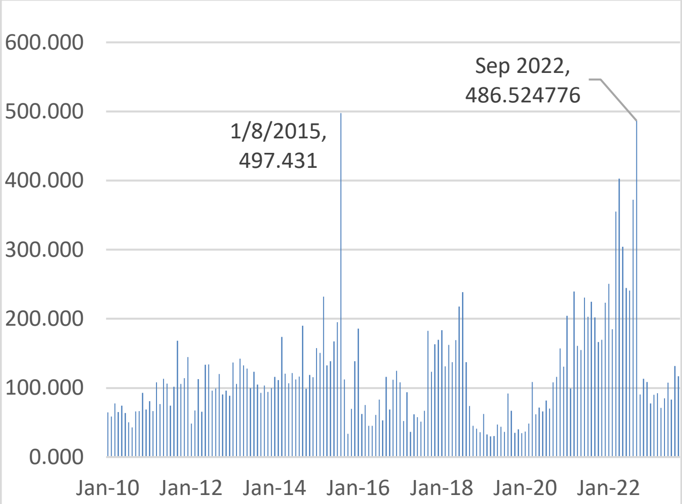
Table 1: Other methods employed by China

2014 - 2018	2022	2023
Period of low to High for USDCNY: 14 Jan 2014 - 3 Jan 2017 Depreciation of the CNY against the USD: 15.3% % Change of the CNY TWI over the same period: +2.7%	Period of Low to High for USDCNY: 28 Feb - 31 Oct 2022 Depreciation of the CNY against the USD: 15.8%. % Change of the CNY TWI over the same period: -2.5%	Period of Low to High for USDCNY: 13 Jan 2023 - 8 Sep 2023 Depreciation of the CNY Against USD: 9.6% % Change of the CNY TWI over the same period: -4.3%
1. Jawboning 2. Ordered banks to put up zero-interest, US-denominated deposit with PBoC amounting to 20% of the notional value of all new forex forwards, swaps and options (first introduced in 2015 and then used again in 2018) 3. Strong CNY reference rate vs. the USD. 4. State Banks Sell USD	1. Jawboning 2. Lower Required Reserve ratio for Foreign deposit by 300bps to 6% (1ppt cut in Apr 2022, 2ppt cut in Sep 2022) 3. Strong CNY reference rate vs. the USD. 4. HIkes risk reserve requirement of 20% on FX forward sales by banks (still in effect) 5. State Banks Sell USD	1. Jawboning 2. Lower Required Reserve ratio for foreign deposit by 200bps to 4% in Sep 2023 3. Strong CNY reference rate vs. the USD. 4. Scrutinizing bulk USD purchases by domestic firms (11 Sep 2023). PBoC's approvals needed for companies that need to purchase $50mn or more. 5. Allowing onshore companies to borrow more overseas to increase foreign capital flows. 6. State Banks Sell USD

What is left in place since 2022 is the 20% risk requirement reserves on FX forward sales by banks. The hike was done in Sep 2022 and has not been scrapped or lowered given persistent downward pressure on the yuan.

We cannot rule out the possibility that FX forward contracts could be limited further by a further hiking of this risk reserves ratio. Since the hike in Sep 2022, FX forward sales contracts by banks have fallen substantially. In other words, clients do not demand as much FX forward because of this punitive measure (Chart 5).

Chart 5: Total FX Forward Sales Contract by Banks to Clients



Source: SAFE, Maybank FX Research & Strategy

Should USD continue to rise alongside UST yields, China can continue to use its foreign exchange reserves to intervene (Chart 6a). Its holdings of US Treasuries have had a precipitous fall in recent months as well (Chart 6b).

Chart 6a: Forex Reserves have been falling in Recent Months

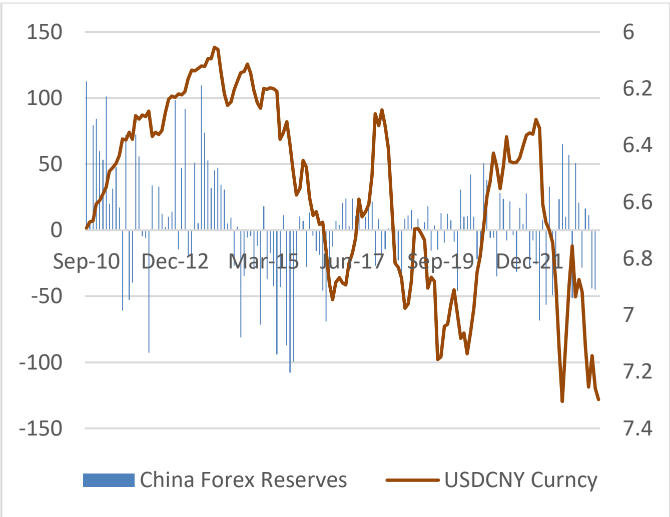
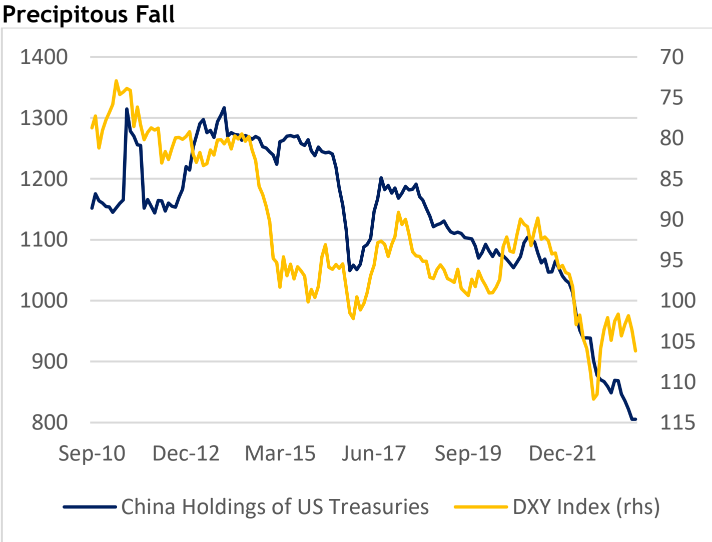


Chart 6b: China's Holdings of US Treasuries Have Had A Precipitous Fall



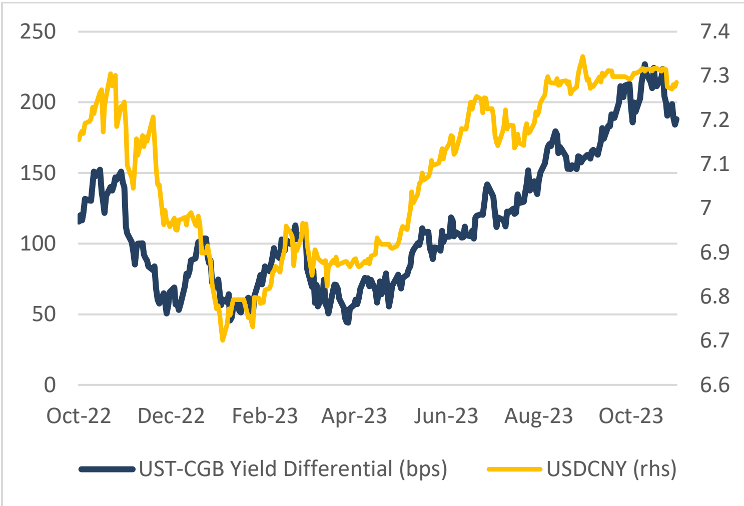
Note: The yellow regions denote notable spikes in implied yield of 1M USDCNH forward.
Source: Bloomberg, Maybank FX Research & Strategy

Taken together, we still see quite a bit of ammunition for PBoC to continue to defend the yuan. In addition, the Fed is near the end of the tightening cycle and as such, USD and UST yields are not likely to gain more bullish momentum. As such, central banks including PBoC is likely to be buying time until the market environment turns more favourable.

Thus far, due to the actions of the authorities to prop up the CNY against the USD in a broadly strong USD and rising UST rates environment, the CNY TWI has also risen alongside the DXY index (Chart 7a). Our base case is that UST yields as well as the USD have reached an interim peak potentially. There is a possibility that capital flows could ease to some extent as yield differential between USTs and CGBs narrow (Chart 7b). However, this is just one factor that could turn a tad more benign. China's recent data releases including its deflationary inflation metrics, contractionary PMIs suggest that recovery is still not gaining traction and likely very fragile. **It is more likely that a bearish USD turn would present an opportunity to short CNY on a TWI basis.**

Chart 7a: CNY TWI Has Appreciated Since Jul 2023

Chart 7b: UST-CGB Yield Differentials Have Softened More Recently



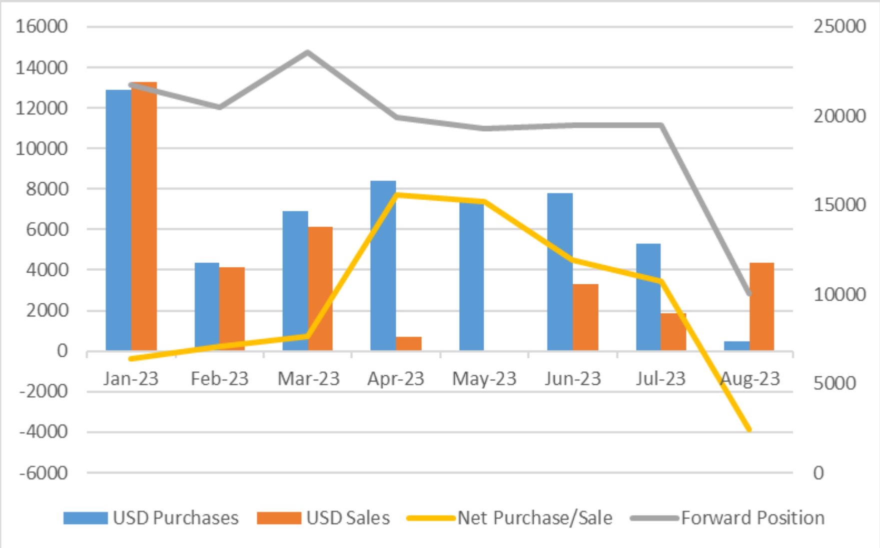
Note: The yellow regions denote notable spikes in implied yield of 1M USDCNH forward.
Source: Bloomberg, Maybank FX Research & Strategy

Reserve Bank of India

Looking at the evolution of USDINR over this year, one might suggest that the RBI is one of the most interventionist central banks in the world, which might not be too far from the truth. Year to date, USDINR spot has traded within a relatively tight 80.88 to 83.29 range (NDF: 81.11 to 83.49) and volatility in the pair has been at two-decade lows. By comparison, the DXY index has traded between a 99.578 low and 107.348 high over the same period. When considering that the DXY is a basket of currencies, which should naturally reduce volatility, this makes the low volatility in the INR even more amazing.

India moved to a market-determined exchange rate system in 1993, and the RBI has long expressed the desirability of a stable and less volatile rupee. This has manifested in the low volatility of the rupee this year as RBI continues in its efforts to "lean against the wind". The RBI purchased a net US$19.8b from Jan to Aug 23 (Chart 8), with the bulk of the purchases concentrated in Apr to Jul cycle where the USD was broadly weaker. With the advent of the higher for longer narrative, we suspect that the RBI is likely to have net sold USD in the subsequent months amid the period of broad USD strength. RBI declares its interventions on a 2-month lagged basis, and by our estimates based on changes to the official foreign reserves, RBI could have net sold as much as US$20.3b over the Aug to Nov period.

Chart 8: RBI's Declared Purchases/Sales of USD and Forward Book



Source: RBI, Maybank GM FX Research & Strategy

As the market narrative for higher and longer yields and stronger USD begins to wane, we think that RBI could once again start to swing back to accumulation of reserves as depreciation pressures on the rupee ease. RBI are very unlikely to exit their current stance of "leaning against the wind" so quickly, and reserve adequacy becomes less of a consideration when a country is accumulating reserves as drawing down on them.

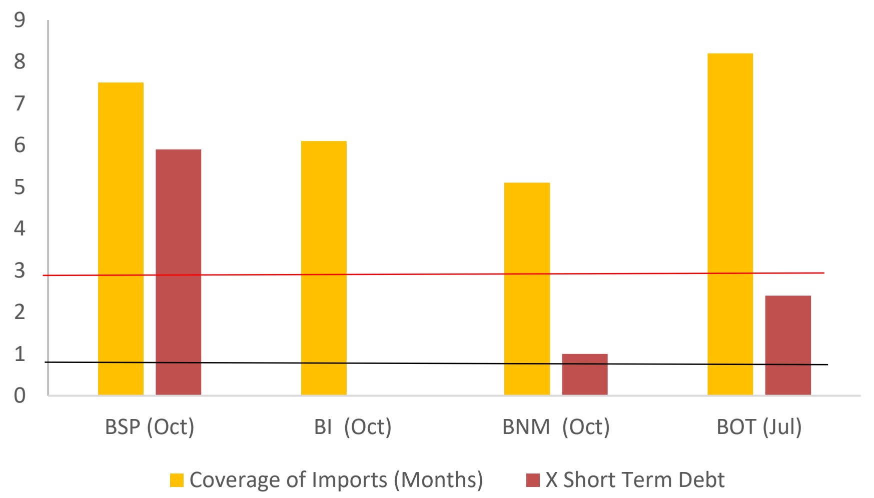
The RBI's preference for a stable INR could also be because of inflows that are to be expected into local bond markets. A class of Indian Government Bonds (IGBs) are to be placed on global bond indices and this is likely to result in upward pressures on the INR, albeit in trickles over time. In addition, India has also relied on other measures to reduce volatility, such as regulating NDF trading and traditionally controlling foreign investments in government bonds. India's "fully accessible" bonds, which allow foreign investors are the ones placed on the index.

Given the RBI's preference for a stable rupee and the current yield advantage that India has vis-à-vis most other countries, there could be carry trade opportunities at play until the RBI decides to end the "lean against the wind" stance. While spot gains could be limited under this stance, spot losses will also likely be similarly limited and the yield pick-up could be considerable.

Are ASEAN Central Banks Feeling the Heat From Falling Reserves?

For a good part of 2023, regional Asian currencies have been under heavy pressure from the surge in UST yields and the strong greenback. Consequently, we have seen a number ASEAN central banks attempt to defend their currencies from seeing a big slide. This has raised questions whether their reserves levels are still at sustainably strong levels. Based on the latest data, we find that the BSP, BI, BOT and BNM have reserves levels that are still adequate based on the "international rule of thumb" (6 months coverage of imports and 1.0x of short-term debt, Chart 9). However, we would like to note that the pace of declines have been quite rapid in recent months (Chart 10). We have noticed that some ASEAN central banks have resorted to more alternative and unconventional methods to support their currencies. In the rest of this section, we will explore the methods that some of these central banks have undertaken.

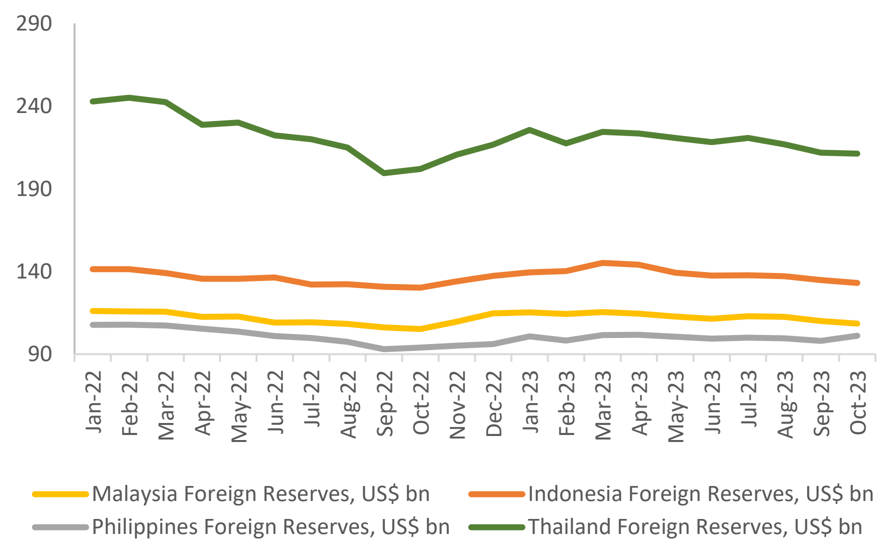
Chart 9: Foreign Reserves Level of BSP, BI and BNM Still Remain Adequate For Now



Source: Bloomberg, Maybank GM FX Research & Strategy

Note: 1) BI's number covers both imports and short term debt
2) Red line represents international level of adequacy for import coverage - 3 months
3) Black line represents international level of adequacy for short term debt coverage 1.0x

Chart 10: Their Foreign Reserves Levels Though Have Declined Quite Substantially As Their Currencies Come Under Pressure



Source: Bloomberg, Maybank GM FX Research & Strategy

What Moves Have Central Banks Undertaken? Are They Actually Effective?

Bank Indonesia (BI)

The Indonesian central bank has been at the forefront within ASEAN in undertaking a number of unconventional and creative actions in trying to mitigate IDR volatility. Such actions may have included rolling out the new export proceed rules, SRBI, BI USD special term deposits and SVBI/SUVBI.

BI USD Special Term Deposits

Since the special term deposits were offered earlier this year, we have not exactly yet seen large FX inflows into the deposits. Total holdings in the FX term deposits stood at about US$1.59bn as of early Oct. Rates offered on the one month are not too far off from USD CDs. However, for the three (referring to the smaller amounts) and six months, the USD CDs are quite a bit higher than the BI special term deposits, which does make it less attractive (Table 2). We do note though that the introduction of the special term deposits were driven by the implementation of the export proceeds rule (talked more below) and that it at least allowed exporters affected by these rules to still be able to draw better rates than what had been existing out there.

Table 2: BI USD Special Term Deposit Rates for the 3 Months and 6 Months Stand Quite a Bit Lower than USD CDs For Certain Amounts

	1 Month	3 Months	6 Months
>USD10m	5.38	5.58	5.62
USD5m - USD10m	5.33	5.53	5.57
USD1m - USD5m	5.28	5.48	5.52
USD Certificate of Deposits (CDs)	5.35	5.60	5.71

Source: Bloomberg, Bank Indonesia, Maybank GM FX Research & Strategy

1) Exports Proceeds Rule

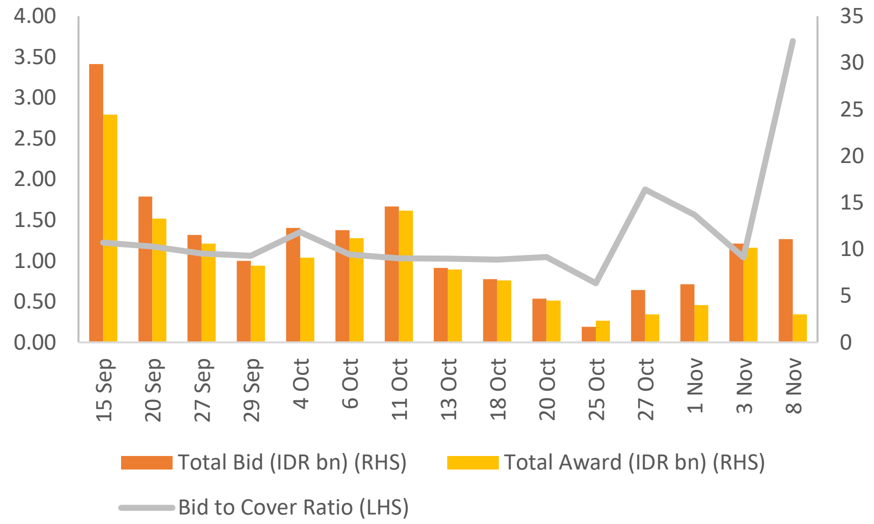
This impact of this has equally been mixed. The rule had required that firms in the natural resources sector (mining, plantations, forestry and fisheries) who have earnings above US$250,000 were required to keep 30% of their earnings onshore for at least three months. However, the policy does not require the exporters convert their earnings and the USDIDR has generally continued to head higher even after the rule introduction. Exporters are still allowed to keep their earnings in foreign currency accounts such as in the earlier talked about BI USD special term deposits. At the same time, exporters are also disincentivized to convert given that IDR rates are lower than BI USD special term deposit rates.

If we look to neighboring Malaysia, a similar policy does not appear to necessarily be having a strong effect on the MYR. Malaysia requires exporters in the goods related industries to repatriate 100% of their earnings back home although they can choose to keep it in foreign currency and there is no time limit for them to retain it onshore. We are getting the impression that exporters may be choosing to not convert given that the value of foreign currency deposits out of the total value of all deposits onshore has been rising in the long term together with the USDMYR.

2) SRBI

The SRBI or also known as the Bank Indonesia Rupiah Securities was introduced in Sep 2023 with the goal to 1) deepen IDR money markets by introducing a new instrument that is tradable, accessible and liquid, 2) optimize the government bonds by BI for money market operations and 3) possibly attract FX inflows to support IDR stability. Regarding the third objective, as of date, the flow has been decent with non-resident investors holding about 17tn rupiah of the one year notes or about 25% of the total one year notes issued to date. We do note though, foreign interest may have been affected by the potential of a tax consideration of 20%. However, narrow interest rates between Indonesia and the US may be making these instruments less favorable too. The SRBI in some sense was also introduced to effectively absorb more IDR liquidity out of the system. So far, it does work given the level of bids received for the SRBI although USDIDR has still headed higher (Chart 11).

Chart 11: Bid Levels for the SRBI Have Been Reasonable, Helping to Absorb IDR Liquidity Although the USDIDR Still Headed Higher



Source: Bloomberg, Maybank GM FX Research & Strategy

3) SVBI/SUVBI

These are a new foreign currency securities (SVBI) and foreign currency sukuk (SUVBI) that would be issued effectively from 21 Nov. For now, the impact of this instrument is uncertain given the narrow interest rate differentials between the US and Indonesia.

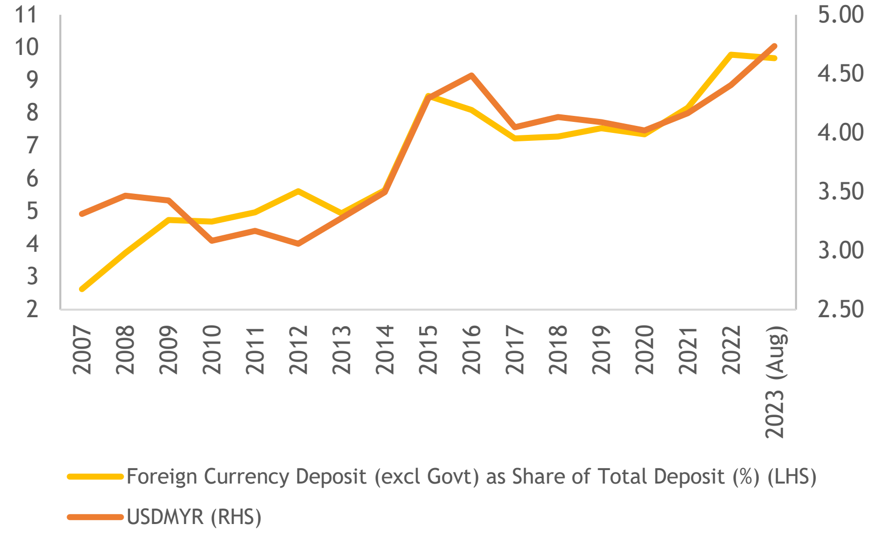
Bank Negara Malaysia (BNM)

Malaysia's central bank has not necessarily undertaken any new unconventional measures this year but we would like to examine some measures they have put in place over the years to try to support MYR stability. These measures include:

1) Repatriation of Export Proceeds

Malaysia requires exporters to repatriate 100% of earnings back to the country. There is no holding period nor is there any conversion requirements. However, the impact of the rule is unclear. Furthermore, we note that the value of foreign currency deposits as a percentage of total value of deposits domestically have been climbing in line with the USDMYR over the years (Chart 12). Although not a certainty, it could imply that exporters could be retaining their earnings in foreign currency and hence, this could be limiting the effect of the rule.

Chart 12: Foreign Currency Deposits Have Been Rising in Line with the USDMYR

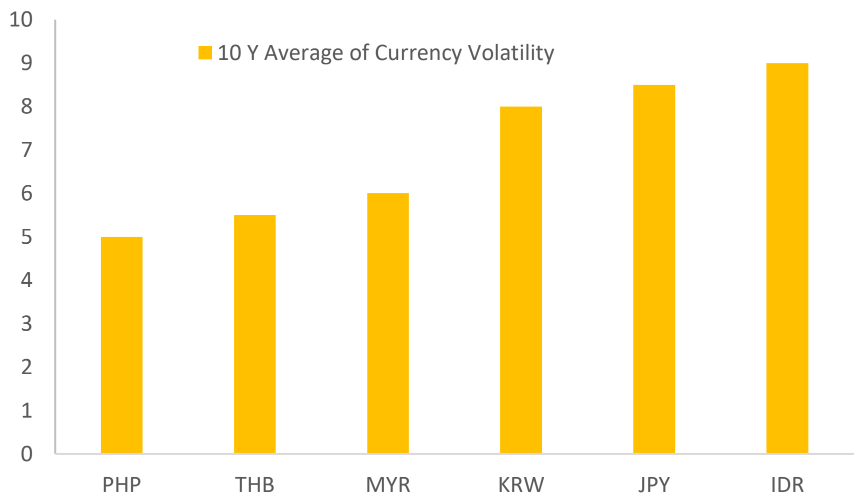


Source: Macrobond, Maybank GM FX Research & Strategy

2) Non-Recognition of NDF

BNM has stated that the MYR is non-internationalized currency and that any offshore trading of MYR such as the MYR NDF is not recognized. MYR volatility has remained quite manageable over the years stays lower than other regional peers such as IDR, JPY and KRW. It is also only marginally more volatile than the THB and PHP (Chart 13). Regardless, the USDMYR has been trending upwards in the medium - long term although this could be due to other factors.

Chart 13: MYR Volatility Has Been Manageable Relative To Peers

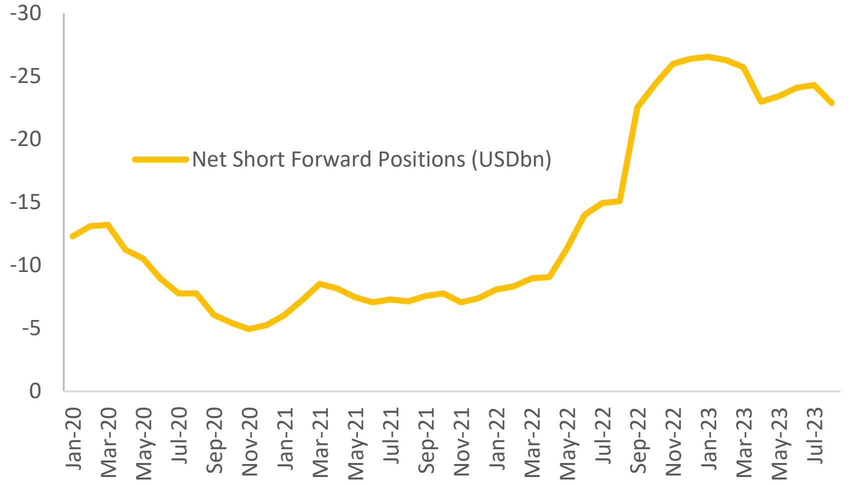


Source: Bloomberg, Maybank GM FX Research & Strategy

3) Forward Contracts

We would like to note that BNM's net short forward positions of USD against MYR (which represents an obligation to deliver USD at a future date) have actually been on the rise since 2022 when the MYR has been coming under heavy pressure with the rising US rates (Chart 14). Whilst this can also constitute a form of sterilization in the market, these actions too have given support to the MYR. Recently, the level of the positions looked to have stabilized.

Chart 14: BNM Net Short Positions Have Risen Heavily Since Last Year

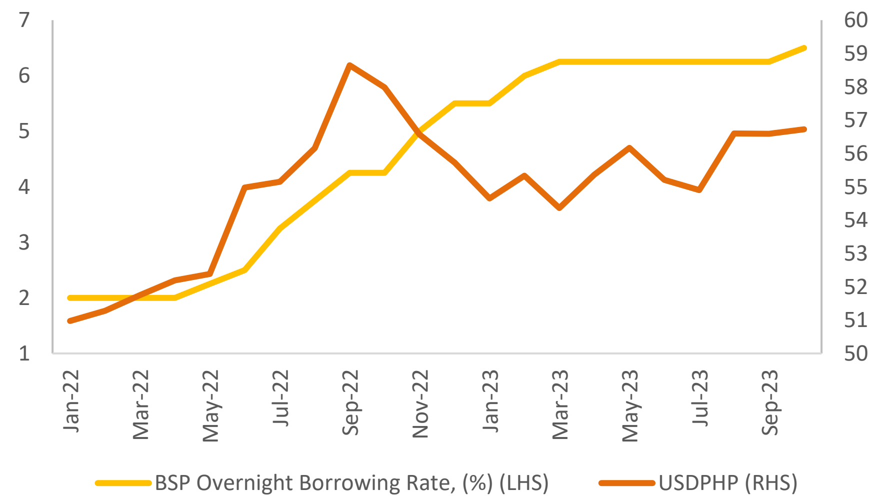


Source: Bloomberg, Maybank GM FX Research & Strategy

Bangko Sentral ng Pilipinas (BSP)

In the last few months, the USDPHP has mainly traded within a narrow range of around 56.00 – 57.00. To date, the BSP has not exactly engaged in a variety of different measures to stabilize the currencies. Instead their actions has so far appeared to have mainly revolved around just utilizing interest rate policy, reserves and comments from central bank officials (jawboning). Most of the jawboning has come from BSP Governor Eli Remolona who had constantly refused to rule out further rate hikes in Oct and now in Nov. The central bank did follow through with its actions in hiking the rates in Oct although it is yet to be seen what would happen for the Nov. The BSP's reserves have also not deteriorated too heavily despite the strong USD period. However, we also note that the effectiveness of their actions may be helped by the smaller nature of the PHP market.

Chart 15: Elevated BSP Rates Appear to Help Stabilize the PHP

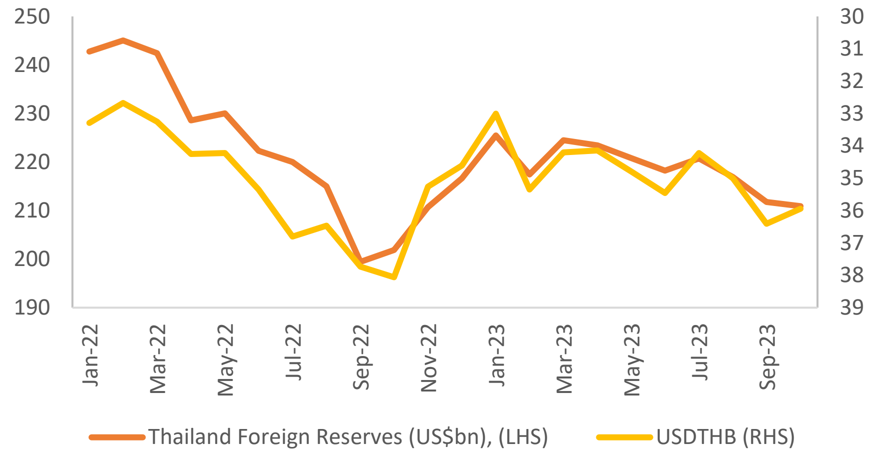


Source: Bloomberg, Maybank GM FX Research & Strategy

Bank of Thailand

The THB has similarly come under pressure in recent times due to a number of external and idiosyncratic factors. However, we have not noticed that the BOT has taken any non-traditional measures this year. The decline in the reserves in the last few months has only so far implied that they may have simply undertaken direct intervention. The central bank has though engaged in some jawboning such as in early October when they said that they "may consider taking care of the baht if it fluctuates abnormally". Thailand also has been relatively less restrictive when it comes to foreign exchange management. The country only requires export proceeds that exceed US$1m or more to be repatriated back home but there are no conversion requirements nor is there any time limit for retention. It also appears that the government has in fact worked to relax the rules as this year they have also allowed investments of up to US$10 million would be permitted for Thai retail investors in foreign securities, up from US$5 million. We do note that Thailand's reserves position as a whole still stands at quite a sufficient level.

Chart 16: Foreign Reserves Have Declined as THB Comes Under Pressure



Source: Bloomberg, Maybank GM FX Research & Strategy
Note: USDTHB axis in reverse order

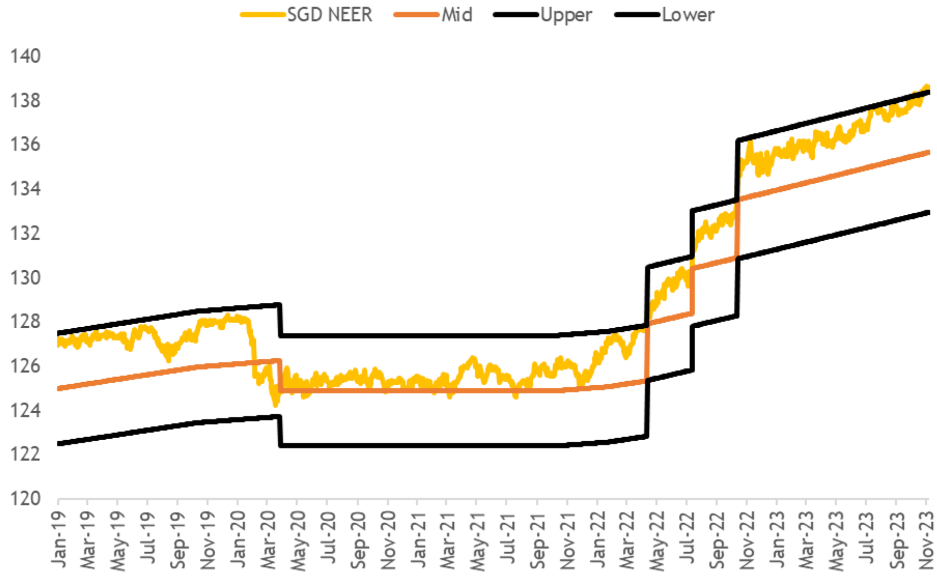
Monetary Authority of Singapore

Singapore's case is rather unique compared to other countries that largely rely on domestic interest rates to manage inflation. As a small, open economy that is reliant on trade, achieving medium-term price stability is achieved through an FX based monetary policy based on managing a trade-weighted basket of currencies referred to as the SGD Nominal Effective Exchange Rate (SGDNEER). The SGDNEER is allowed to float between a band and FX intervention is the tool used to ensure that the SGDNEER stays within the band.

The SGDNEER basket, band and crawl are all undisclosed by MAS, however market participants have their assumptions of these parameters. At Maybank, our basket is based on the 14 largest trading partners, we believe the band to be at +2%/-2% and the crawl rate to be at 1.5% per annum. Based on these assumptions, the SGDNEER has fluctuated between +0.79% to 2.21% above the mid-point of the policy band in 2023. Upside pressures on the SGDNEER have been strong (Chart 15) and this is supported by MAS' net purchase of US$12.0 billion from Jan to Jun 23 to limit the SGD strength (buy USD and sell SGD in the spot market).

Reserve adequacy for Singapore has therefore not been a major issue that MAS has had to contend with, nor has it come under scrutiny from the market. Quite the contrary, as Singapore has been able to make several large transfers from the official foreign reserves to its sovereign wealth fund for longer-term management. From Mar to Oct 22, a total of S$237.6 billion was transferred from MAS to GIC as they were deemed excess to the required reserves for implementing monetary policy and supporting financial stability.

Chart 17: Upside Pressures to SGDNEER Have Persisted



Source: Bloomberg, Maybank GM FX Research & Strategy

The policy stance is decided at quarterly meetings by MAS, where they announce tweaks to either the width of the band, the appreciation path or crawl or the level at which the SGDNEER is centered. It is important to note that even in the most challenging times for Singapore, MAS has never set the SGDNEER on a path of depreciation. Coupled with robust macroeconomic fundamentals such as a persistent current account surplus and fiscal discipline, the SGD has exhibited safe-haven properties and from our observations has outperformed most currencies in the SGDNEER basket this year, leading to upside pressures on the SGDNEER.

Moving forward, we do expect the upside pressures on the SGDNEER to remain. We think that the SGDNEER should trade within the 1% to 2% above the mid-point range. We would recommend to sell the SGDNEER at 2% or higher and buy the SGDNEER on dips below 1.5%. This is predicated on MAS not materially changing its policy stance and pivoting to be more growth supportive. We think that this is likely, based on the balance of risks to growth and inflation in Singapore. MAS is keenly aware of upside risks to inflation, while actual outturns to growth thus far have been slightly better than expected.

Conclusion

In conclusion, regional central banks appear to have sufficient reserves to stem any short-term capital outflows that could cause unwelcome volatility in their currencies. Generally speaking, FX reserves as a percentage of exports/short term debt/GDP are healthily above suggested thresholds. These ratios are suggested by the IMF and central banks as measure of reserve adequacy. However, we would also like to reiterate our broad view that we expect the USD to gradually decline going into 2024. If this should come to fruition, then the idea of reserves adequacy could be moot as regional central banks could take the chance to accumulate reserves instead. Additionally, for central banks that would prefer to conserve their reserves, other measures do exist for them to manage capital outflows.

Appendix: Summary Tables

Table 1: China - Key Macroeconomic Indicators

	2019	2020	2021	2022E	2023E	2024E
Real GDP (%)	6.0	2.5	8.5	3.0	5.2	4.4
Private Consumption (%)	9.3	0.0	13.1	2.3	6.4	4.1
Government Consumption (%)	8.8	5.0	4.6	6.6	6.9	6.5
Gross Fixed Capital Formation (%)	7.3	1.9	12.0	5.4	4.3	4.4
Net Exports of Goods & Services (% pt cont)	0.8	0.6	1.9	0.5	0.3	0.5
Current Account Balance (% of GDP)	0.7	1.5	2.0	2.2	1.6	1.6
Fiscal Balance (% of GDP)	(2.8)	(3.7)	(3.1)	(2.8)	(3.8)	(3.8)
Inflation Rate (%)	2.9	2.5	0.9	2.0	0.3	1.1
Unemployment Rate (%)	5.2	5.2	5.1	5.5	5.2	4.9
Exchange Rate (per USD, end-period)	6.98	6.52	6.38	6.96	7.25	7.20
*Benchmark Interest Rate (% p.a., end-period)	4.15	3.85	3.80	3.65	3.30	3.30

** Refers to 1 Year Loan Prime Rate.*

Source: CEIC, Maybank IBG Research

Table 2: Indonesia - Key Macroeconomic Indicators

	2019	2020	2021	2022	2023E	2024E
Real GDP (%)	5.0	-2.1	3.7	5.3	5.0	5.2
Private Consumption (%)	5.0	-2.6	2.0	4.9	4.6	5.2
Government Consumption (%)	3.3	2.1	4.2	-4.5	4.0	4.0
Gross Fixed Capital Formation (%)	4.5	-5.0	3.8	3.9	4.0	6.0
Exports of Goods & Services (%)	-0.5	-8.4	18.0	16.3	4.5	8.5
Imports of Goods & Services (%)	-7.1	-17.6	24.9	14.7	2.0	8.9
Current Account Balance (% of GDP)	-2.7	-0.4	0.3	1.0	-0.4	-1.2
Fiscal Balance (% of GDP)	-2.2	-6.1	-4.6	-2.4	-2.5	-2.5
Inflation Rate (%, period average)	2.8	2.0	1.6	4.2	3.7	3.0
Unemployment Rate (%, period average)	5.2	7.1	6.5	5.9	5.3	5.1
Exchange Rate (per USD, end-period)	13,866	14,050	14,253	15,568	15,500	14,600
BI Policy Rate (% p.a., end-period)	5.00	3.75	3.50	5.50	6.25	5.50

Source: CEIC, Maybank IBG Research

Table 3: Malaysia - Key Macroeconomic Indicators

	2019	2020	2021	2022	2023E	2024E
Real GDP (%)	**4.4**	**(5.5)**	**3.1**	**8.7**	**4.0**	**4.4**
Private Consumption (%)	7.7	(4.2)	1.9	11.2	4.7	4.8
Government Consumption (%)	1.8	5.0	5.3	4.5	3.2	6.0
Gross Fixed Capital Formation (%)	(2.1)	(14.4)	(0.9)	6.8	5.5	5.1
Exports of Goods & Services (%)	(1.0)	(8.6)	15.4	14.5	(3.2)	3.4
Imports of Goods & Services (%)	(2.4)	(7.9)	17.7	15.9	(4.0)	4.2
Current Account Balance (% of GDP)	2.3	4.2	3.8	2.6	2.4	2.3
Fiscal Balance (% of GDP)	(3.7)	(6.2)	(6.4)	(5.6)	(5.0)	(4.3)
Inflation Rate (%, period average)	1.0	(1.2)	2.5	3.3	2.6	3.0
Unemployment Rate (%, period average)	3.3	4.5	4.6	3.8	3.5	3.4
Exchange Rate (per USD, end-period)	4.09	4.02	4.17	4.40	4.65	4.35
10-Year Government Bond Yield (%, end-period)	3.31	2.65	3.59	4.00	3.80	3.30
Benchmark Interest Rate (% p.a., end-period)	3.00	1.75	1.75	2.75	3.00	3.00

Source: CEIC, Maybank IBG Research

Table 4: Philippines - Key Macroeconomic Indicators

	2019	2020	2021	2022	2023E	2024E
Real GDP (%)	6.1	(9.5)	5.7	7.6	5.8	6.5
Private Consumption (%)	5.9	(8.0)	4.2	8.3	5.5	5.5
Government Consumption (%)	9.1	10.5	7.2	4.9	3.5	6.2
Gross Fixed Capital Formation (%)	3.9	(27.3)	9.8	9.7	7.9	10.4
Exports of Goods & Services (%)	2.6	(16.1)	8.0	10.9	2.7	4.5
Imports of Goods & Services (%)	2.3	(21.6)	12.8	13.9	1.7	5.8
Current Account Balance (% of GDP)	(0.8)	3.3	(1.4)	(4.6)	(3.8)	(3.5)
Fiscal Balance (% of GDP)	(3.4)	(7.6)	(8.6)	(7.3)	(6.0)	(5.5)
Inflation Rate (%, period average)	2.4	2.4	3.9	5.8	6.0	3.5
Unemployment Rate (%, period average)	5.1	10.4	7.8	5.4	4.5	4.8
Exchange Rate (per USD, end-period)	50.7	48.0	51.0	55.7	57.0	54.5
Benchmark Interest Rate (% p.a., end-period)	4.00	2.00	2.00	5.50	6.50	5.75

Source: CEIC, Maybank IBG Research

Table 5: Singapore - Key Macroeconomic Indicators

	2019	2020	2021	2022	2023E	2024E
Real GDP (%)	1.3	(3.9)	8.9	3.6	0.8	2.2
Private Consumption (%)	2.8	(13.1)	6.6	9.7	3.8	2.5
Government Consumption (%)	3.2	13.0	3.7	-2.3	2.3	2.0
Gross Fixed Capital Formation (%)	2.3	(14.8)	18.0	1.6	(1.2)	2.0
Exports of Goods & Services (%)	0.2	0.4	11.7	(1.3)	-0.5	1.8
Imports of Goods & Services (%)	0.0	(1.1)	12.0	(1.9)	-0.6	2.0
Current Account Balance (% of GDP)	16.2	16.4	18.0	19.3	18.6	18.0
Fiscal Balance (% of GDP)	0.2	(10.5)	0.3	(0.3)	(0.1)	0.5
Inflation Rate (%)	0.6	(0.2)	2.3	6.1	4.8	3.3
Unemployment Rate (%)	2.3	3.0	2.7	2.1	2.0	2.0
Exchange Rate (per USD, end-period)	1.35	1.3	1.35	1.34	1.365	1.34
10-Year Government Bond Yield (%, end-period)	1.73	0.83	1.64	3.09	3.10	2.75
3M SORA (% p.a., end-period)	1.27	0.13	0.19	3.10	3.80	3.20

Source: CEIC, Maybank IBG Research

Table 6: Thailand - Key Macroeconomic Indicators

	2019	2020	2021	2022	2023E	2024E
Real GDP (%)	2.1	-6.1	1.5	2.6	2.9	3.6
Private Consumption (%)	4.0	-0.8	0.6	6.3	4.1	4.2
Government Consumption (%)	1.6	1.4	3.7	0.2	-2.8	1.8
Gross Fixed Capital Formation (%)	2.0	-4.8	3.1	2.3	1.4	2.7
Exports of Goods & Services (%)	-3.0	-19.7	11.1	6.8	2.1	2.9
Imports of Goods & Services (%)	-5.2	-13.9	17.8	4.1	-0.7	4.2
Current Account Balance (% of GDP)	7.0	4.2	-2.1	-3.4	2.0	3.5
Fiscal Balance (% of GDP)	-3.0	-5.2	-4.8	-3.5	-3.5	-3.5
Inflation Rate (%, period average)	0.7	-0.8	1.2	6.1	2.5	2.0
Unemployment Rate (%, period average)	1.0	1.7	1.9	1.3	1.1	1.0
Exchange Rate (per USD, end-period)	30.0	30.0	33.4	34.6	36.5	33.5
Benchmark Interest Rate (% p.a., end-period)	1.25	0.50	0.50	1.25	2.50	2.25

Source: CEIC, Maybank IBG Research

Table 7: Vietnam - Key Macroeconomic Indicators

	2019	2020	2021	2022	2023E	2024E
Real GDP (%)	7.4	2.9	2.6	8.0	4.8	6.0
Private Consumption (%)	7.0	0.4	2.0	7.8	3.1	5.3
Government Consumption (%)	5.4	1.2	4.7	3.6	5.8	5.6
Gross Fixed Capital Formation (%)	7.7	4.1	3.7	6.0	5.3	7.2
Exports of Goods & Services (%)	6.2	4.1	14.0	4.9	-2.6	5.8
Imports of Goods & Services (%)	4.9	3.3	16.2	2.2	-3.3	5.7
*Current Account Balance (% of GDP)	3.6	4.3	(2.1)	(0.3)	3.5	3.5
*Fiscal Balance (% of GDP)	(2.1)	(2.7)	(2.5)	2.4	(4.6)	(4.5)
Inflation Rate (%)	2.8	3.2	1.8	3.1	3.4	3.5
Unemployment Rate (%)	2.2	2.5	3.0	2.3	2.3	2.2
Exchange Rate (per USD, end-period)	23,173	23,098	22,826	23,633	24,500	24,000
Benchmark Interest Rate (% p.a., end-period)	6.00	4.00	4.00	6.00	4.50	4.50

**Vietnam started using new nominal GDP series in 2021. 2022 figures are actual outturns for all variables except current account and fiscal balance.*

Source: CEIC, Maybank IBG Research

Table 8: Cambodia - Key Macroeconomic Indicators

	2019	**2020**	**2021**	**2022E**	**2023E**	**2024E**
Real GDP (%)	7.1	(3.1)	3.0	5.2	5.4	5.9
Private Consumption (%)	6.1	(4.3)	(5.3)	16.7	5.0	6.0
Government Consumption (%)	6.8	13.0	22.7	(41.6)	6.0	5.8
Gross Fixed Capital Formation (%)	14.3	(2.7)	6.8	20.0	5.4	7.0
Exports of Goods & Services (in USD terms, %)	13.3	(11.3)	13.5	20.7	0.9	8.5
Imports of Goods & Services (in USD terms, %)	11.1	(8.9)	23.1	22.3	1.3	7.5
Current Account Balance (% of GDP)	(15.0)	(8.5)	(40.7)	(23.0)	(5.0)	(4.0)
Fiscal Balance (% of GDP)	2.3	(4.0)	(6.4)	(0.2)	(3.0)	(3.2)
Inflation Rate (%)	1.9	2.9	2.9	5.3	2.5	3.0
Unemployment Rate (%)	0.1	0.3	0.3	0.5	0.5	0.5
Exchange Rate (per USD, end-period)	4,070	4,046	4,074	4,070	4,100	4,080
*Benchmark Interest Rate (% p.a., end-period)	2.30	2.00	2.0	2.0	2.00	2.00

** Refers to one-year interest rate applied under Liquidity-Providing Collateralized Operation (LPCO) mechanism.*

Source: CEIC, Maybank IBG Research

Performance and Valuation Summary

Equity performance by Country (in local currency terms)

Name	Index level	FX rate	--- Absolute performance (local currency) ---							
			-1w	-1m	-3m	-6m	-1y	MTD	QTD	YTD
MSCI All Country World	662		1	1	(3)	2	14	3	(4)	9
MSCI Emerging Market	956		3	2	(5)	(3)	6	4	(3)	(0)
MSCI Asia Pac (inc Japan)	157		2	1	(5)	(3)	10	3	(3)	1
MSCI Asia Pac (ex Japan)	492		3	1	(6)	(5)	6	4	(3)	(3)
MSCI Asia x JP	605		3	1	(6)	(4)	8	4	(3)	(2)
MSCI Far East (ex Japan)	528		3	1	(7)	(7)	8	5	(4)	(4)
MSCI ASEAN	602		2	1	(7)	(10)	(2)	4	(5)	(8)
MSCI Emerging Asia	511		3	1	(6)	(3)	9	5	(3)	(1)
MSCI EM Latin America	2,350		4	8	(4)	3	4	5	(1)	10
MSCI EMMEA	187		1	4	(4)	(3)	(4)	3	(3)	(3)
MSCI Frontier	480		2	(1)	(7)	1	6	3	(6)	2
MSCI Asia x JP Small Cap	1,241		3	1	(1)	5	16	5	(2)	10
China - Shanghai Composite	3,053	7.3	1	(1)	(6)	(9)	0	1	(3)	(1)
China - H-shares	6,030	7.8	2	1	(9)	(10)	9	3	(5)	(10)
Hong Kong - HSI	17,511	7.8	2	(0)	(9)	(12)	7	2	(5)	(11)
Taiwan - TAIEX	16,746	32.3	2	1	(1)	6	23	4	1	18
Korea - KOSPI	2,427	1,310.1	4	1	(7)	(3)	0	5	(5)	9
Singapore - STI	3,135	1.4	2	(1)	(5)	(3)	(1)	2	(3)	(4)
Malaysia - KLCI	1,452	4.7	1	2	(1)	1	0	1	(1)	(3)
Thailand - SET	1,405	35.6	0	(2)	(8)	(10)	(13)	2	(10)	(16)
Indonesia - JCI	6,838	15,655.0	1	(1)	(0)	1	(3)	3	(2)	(0)
Philippines - PSEi	6,188	55.9	4	(1)	(5)	(7)	(1)	4	0	(6)
India - Sensex	64,832	83.3	1	(1)	(2)	5	6	2	(1)	7
Vietnam - Ho Chi Minh	1,114	24,380.0	4	(2)	(10)	6	13	7	(9)	11
Australia ASX 200	7,015	1.6	2	1	(4)	(3)	0	3	(4)	(0)
New Zealand - NZX50	11,198	1.7	1	(0)	(5)	(6)	0	3	(3)	(2)
Japan - Nikkei 225	32,646	150.9	2	5	1	12	18	3	(0)	25
Japan - TOPIX	2,335	150.9	1	3	2	11	20	1	(1)	23
S&P 500	4,347	1.0	1	0	(3)	6	16	3	(4)	13
Russell 2000	1,687	1.0	(2)	(4)	(13)	(4)	(4)	1	(12)	(4)
FTSE 100	7,456	0.8	0	(0)	(2)	(4)	2	2	(0)	0
Euro Stoxx	4,229	0.9	1	3	(2)	(2)	13	3	(1)	11

Source: Maybank IBG Research, Factset, MSCI, data as of 9 November 2023

Equity performance by Country (in USD terms)

Name	Index level	FX rate	--- Absolute performance (USD) ---							
			-1w	-1m	-3m	-6m	-1y	MTD	QTD	YTD
MSCI All Country World	662		1	1	(3)	2	14	3	(4)	9
MSCI Emerging Market	956		3	2	(5)	(3)	6	4	(3)	(0)
MSCI Asia Pac (inc Japan)	157		2	1	(5)	(3)	10	3	(3)	1
MSCI Asia Pac (ex Japan)	492		3	1	(6)	(5)	6	4	(3)	(3)
MSCI Asia x JP	605		3	1	(6)	(4)	8	4	(3)	(2)
MSCI Far East (ex Japan)	528		3	1	(7)	(7)	8	5	(4)	(4)
MSCI ASEAN	602		2	1	(7)	(10)	(2)	4	(5)	(8)
MSCI Emerging Asia	511		3	1	(6)	(3)	9	5	(3)	(1)
MSCI EM Latin America	2,350		4	8	(4)	3	4	5	(1)	10
MSCI EMMEA	187		1	4	(4)	(3)	(4)	3	(3)	(3)
MSCI Frontie	480		2	(1)	(7)	1	6	3	(6)	2
MSCI Asia x JP Small Cap	1,241		3	1	(1)	5	16	5	(2)	10
China - Shanghai Composite	3,053	7.3	2	(1)	(7)	(14)	(0)	1	(3)	(6)
China - H-shares	6,030	7.8	2	1	(9)	(10)	10	3	(4)	(10)
Hong Kong - HSI	17,511	7.8	2	0	(9)	(11)	8	3	(4)	(12)
Taiwan - TAIEX	16,746	32.3	2	1	(2)	1	21	5	(1)	13
Korea - KOSPI	2,427	1,310.1	6	4	(6)	(2)	4	9	(5)	5
Singapore - STI	3,135	1.4	2	0	(6)	(5)	2	3	(3)	(5)
Malaysia - KLCI	1,452	4.7	2	3	(3)	(4)	0	3	(2)	(9)
Thailand - SET	1,405	35.6	1	2	(10)	(15)	(10)	4	(11)	(18)
Indonesia - JCI	6,838	15,655.0	3	(0)	(3)	(5)	(3)	5	(5)	(1)
Philippines - PSEi	6,188	55.9	5	1	(5)	(7)	3	5	1	(6)
India - Sensex	64,832	83.3	1	(1)	(2)	3	4	2	(2)	6
Vietnam - Ho Chi Minh	1,114	24,380.0	4	(2)	(12)	2	15	8	(10)	7
Australia ASX 200	7,015	1.6	2	1	(6)	(8)	(0)	4	(4)	(6)
New Zealand - NZX50	11,198	1.7	3	(1)	(7)	(11)	2	5	(3)	(8)
Japan - Nikkei 225	32,646	150.9	2	4	(3)	(0)	14	3	(3)	9
Japan - TOPIX	2,335	150.9	0	2	(3)	(0)	16	1	(4)	8
S&P 500	4,347	1.0	1	0	(3)	6	16	3	(4)	13
Russell 2000	1,687	1.0	(2)	(4)	(13)	(4)	(4)	1	(12)	(4)
FTSE 100	7,456	0.8	1	0	(5)	(6)	10	3	(3)	2
Euro Stoxx	4,229	0.9	2	4	(4)	(4)	21	5	(2)	12

Source: Maybank IBG Research, Factset, MSCI, data as of 9 November 2023

Equity performance by Country - relative performance

Name	Index level	FX rate	--- Relative performance to MSCI Asia x Japan --- -1w	-1m	-3m	-6m	-1y	MTD	QTD	YTD
MSCI All Country World	662		(2)	(0)	2	6	6	(1)	(0)	12
MSCI Emerging Market	956		(0)	1	1	2	(1)	0	0	2
MSCI Asia Pac (inc Japan)	157		(1)	0	1	1	2	(1)	(0)	3
MSCI Asia Pac (ex Japan)	492		(0)	0	0	(1)	(1)	(0)	(0)	(0)
MSCI Asia x JP	605									
MSCI Far East (ex Japan)	528		0	0	(1)	(2)	1	0	(1)	(2)
MSCI ASEAN	602		(0)	(0)	(1)	(5)	(9)	(0)	(2)	(6)
MSCI Emerging Asia	511		0	0	0	1	1	0	0	2
MSCI EM Latin America	2,350		1	7	2	8	(4)	1	2	13
MSCI EMMEA	187		(2)	3	2	1	(12)	(2)	0	(0)
MSCI Frontier	480		(1)	(2)	(1)	5	(1)	(1)	(2)	4
MSCI Asia x JP Small Cap	1,241		0	0	4	9	8	1	1	12
China - Shanghai Composite	3,053	7.3	(1)	(3)	(1)	(9)	(8)	(3)	0	(3)
China - H-shares	6,030	7.8	(1)	(0)	(3)	(6)	2	(1)	(1)	(8)
Hong Kong - HSI	17,511	7.8	(1)	(1)	(3)	(7)	0	(2)	(1)	(9)
Taiwan - TAIEX	16,746	32.3	(0)	0	4	6	14	1	3	15
Korea - KOSPI	2,427	1,310.1	3	3	(1)	2	(3)	5	(1)	7
Singapore - STI	3,135	1.4	(0)	(1)	(0)	(1)	(5)	(1)	(0)	(2)
Malaysia - KLCI	1,452	4.7	(1)	2	3	0	(7)	(1)	1	(7)
Thailand - SET	1,405	35.6	(2)	1	(4)	(11)	(18)	(1)	(8)	(16)
Indonesia - JCI	6,838	15,655.0	(0)	(2)	2	(1)	(11)	0	(1)	2
Philippines - PSEi	6,188	55.9	2	(0)	1	(2)	(5)	1	5	(4)
India - Sensex	64,832	83.3	(2)	(2)	3	8	(4)	(2)	2	8
Vietnam - Ho Chi Minh	1,114	24,380.0	2	(3)	(6)	6	8	4	(7)	9
Australia ASX 200	7,015	1.6	(1)	0	(0)	(4)	(8)	(1)	(1)	(3)
New Zealand - NZX50	11,198	1.7	(0)	(2)	(1)	(7)	(6)	1	0	(6)
Japan - Nikkei 225	32,646	150.9	(1)	3	2	4	7	(1)	(0)	12
Japan - TOPIX	2,335	150.9	(3)	1	3	4	9	(3)	(1)	10
S&P 500	4,347	1.0	(2)	(1)	3	10	8	(2)	(0)	16
Russell 2000	1,687	1.0	(4)	(5)	(7)	1	(12)	(3)	(9)	(2)
FTSE 100	7,456	0.8	(2)	(1)	1	(2)	3	(1)	1	4
Euro Stoxx	4,229	0.9	(0)	3	1	0	14	1	1	14

Source: Maybank IBG Research, Factset, MSCI, data as of 9 November 2023

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