

Macro Insights

US\$/RMB outlook amid economic asynchronicity

US\$/RMB rates change in tandem with US-Sino interest rate differentials as the two variables both reflect economic asynchronicity in the two largest economies. The latest cycle with strong US dollar and weak renminbi was due to stronger economy in the US than in Europe and China and higher geopolitical risks after the Russia-Ukraine war. Looking forward, renminbi may remain weak in near term before mild appreciation in 2024. Next year, US-Sino interest rate differentials may shrink as US nominal GDP growth gradually declines and China's nominal GDP growth slowly rebounds. US\$/RMB rates are expected to reach 7.2 at end-2023 and 7.0 at end-2024.

- Factors influencing US dollar index:** the dynamics in the relative strength of US economy and risk aversion sentiment in global market. When the US economy performs better than other economies, US dollar tends to appreciate. When risk aversion sentiment rises, US dollar tends to strengthen. Since EUR/US\$ rate is the largest component in US dollar index, economic asynchronicity between US and Eurozone and geopolitical risks related to Europe has a significant influence on US dollar index.
- Factors influencing US\$/RMB rate:** US-Sino economic asynchronicity and geopolitical risks especially related to China. US\$/RMB rates have a stronger correlation with US-Sino short-term interest rate differentials than with long-term ones. US-Sino tensions especially over Chinese Taiwan issue could noticeably weaken renminbi while strengthening US dollar.
- The latest cycle with strong US dollar & weak renminbi:** stronger economy in the US than in Europe & China, higher geopolitical risks after the Russia-Ukraine war and increasing concerns about geopolitical tensions in Taiwan Strait.
- Outlook for US dollar & RMB rates ahead:** As the US economy and inflation remains resilient or sticky in near term, US dollar may remain strong in next several weeks. However, the dollar may weaken in 2024 when the US economy and inflation gradually slows. If the Russia-Ukraine war could end in 2024, market sentiment for Eurozone economy and the Euro would be significantly boosted. Renminbi may remain weak in near term before mild appreciation in 2024. Possible weakening of US dollar and a gradual recovery of China's economy should provide some support to renminbi.

Scenario Analysis on US\$/RMB rates at end-2024

Scenarios	US GDP growth	China GDP growth	3M Libor-Shibor differentials	US\$/RMB
S1: US mild slowdown & China moderate recovery	1.5	4.9	2.35	7.10
S2: US sharp slowdown & China moderate recovery	0.8	4.8	1.65	6.90
S3: US mild recession & China moderate recovery	0.1	4.7	0.70	6.65
S4: US mild slowdown & China tepid growth	1.4	4.2	2.60	7.25
S5: US sharp slowdown & China tepid growth	0.7	4.1	1.90	7.05
S6: US mild recession & China tepid growth	0.0	4.0	0.95	6.85

Source: Wind, CMBIGM estimates

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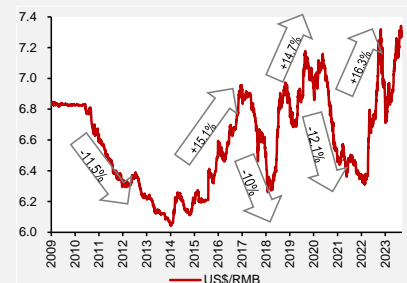
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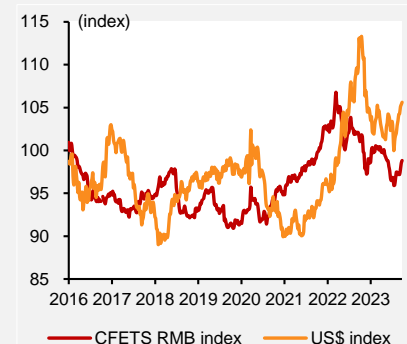
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Source: Wind, CMBIGM



Source: Wind, CMBIGM

What factors will influence US dollar index?

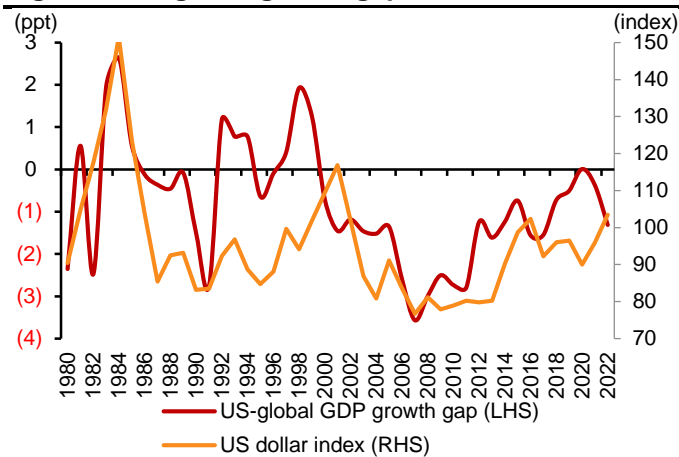
The moving trend of US dollar index reflects the dynamics in the relative strength of US economy and risk aversion sentiment in global market. When the US economy performs more strongly than other economies, US dollar index tends to increase. Changes of risk aversion sentiment in global market also have an impact on US dollar index. US dollar is a safe haven in global market with the dominate role in international monetary system. Global investors consider the US as the safest place to invest. When risk aversion sentiment rises, investors tend to sell other currencies to buy US dollar and the US dollar index will increase.

Economic asynchronicity or divergence between the US and Eurozone has a significant impact on US dollar index. US dollar index is a measure of the dollar's value against six major currencies (the euro, Japanese yen, British pound, Canadian dollar, Swedish krona and Swiss franc). The euro is the largest component with its weight at 57.6% and the remaining five currencies respectively accounted for 13.6% (JPY), 11.9% (GBP), 9.1% (CAD), 4.2% (SEK) and 3.6% (CHF) in the index. Due to the high weight of the EUR/US\$ rate in the US dollar index, economic & policy divergence in Eurozone and the US has the greatest impact on the US dollar index. When the US economy grows stronger than the Eurozone economy, the Fed will adopt a tighter policy than the ECB. Then the US-Eurozone interest spreads will increase and the US dollar index tends to increase. According to our calculation using weekly data in 2005-8M23, the simple correlation coefficients of US dollar index with 3M Libor-Euribor differentials, US-Eurozone 2Y T-bond rate differentials and 10Y T-bond rate differentials respectively reached around 0.74, 0.79 and 0.70.

Geopolitical risks especially those related to Europe tend to weaken the Euro and strengthen US dollar index. Eurozone economy is more fragile to external geopolitical shocks than the US economy due to its higher dependence on foreign trade and cross-border investment. In addition, US dollar can benefit from the flight-to-safety effect when geopolitical risks are high.

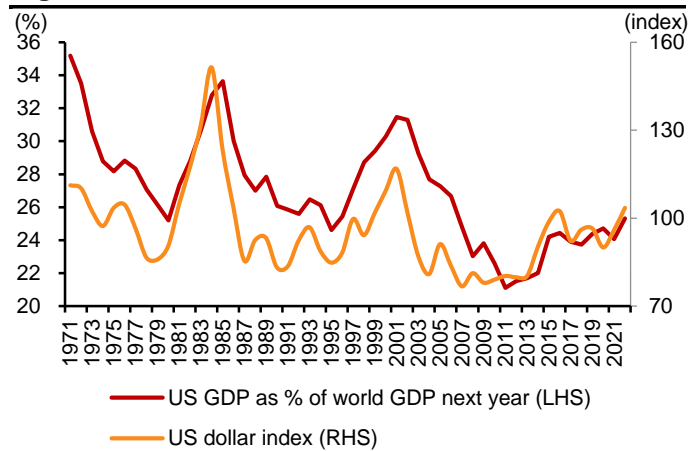
From the perspective of balance of payments, capital flow has a more significant influence on exchange rates than trade flow does as the former account for over 80% of daily forex trade in the global market. We note US dollar index has a similar trend like financial account balance in US's annual BOP.

Figure 1: US-global growth gap and US dollar index



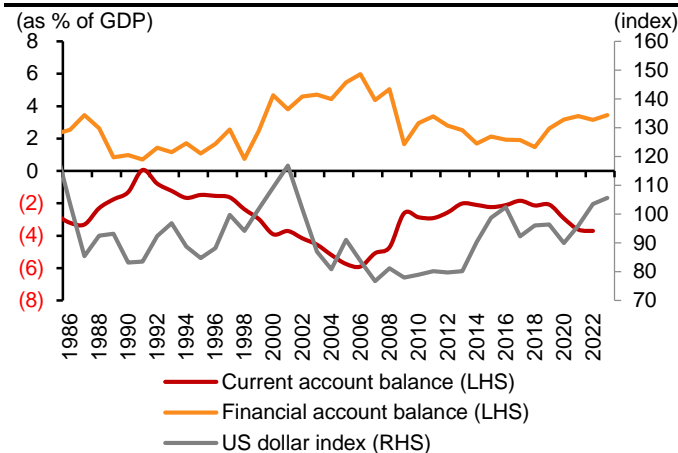
Source: Wind, CMBIGM estimates

Figure 2: US GDP as % of World GDP and dollar index



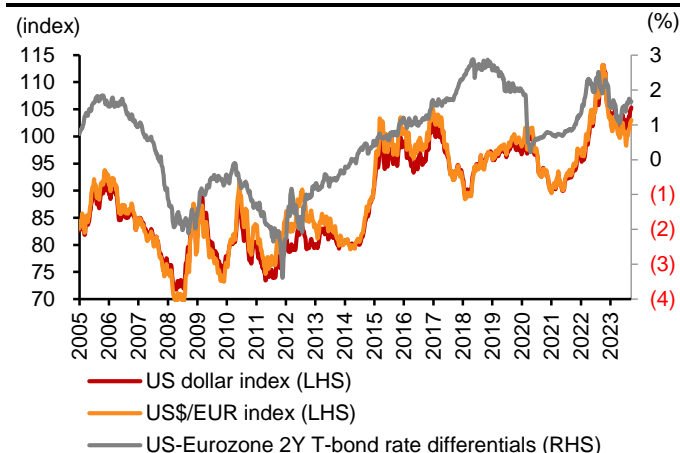
Source: Wind, CMBIGM estimates

Figure 3: US current account and financial account



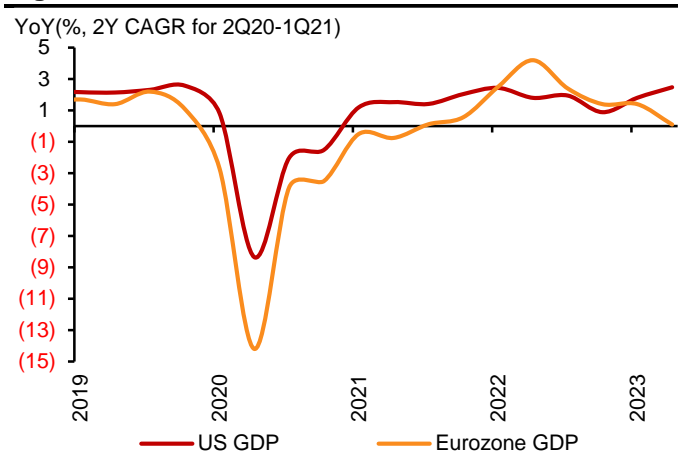
Source: Wind, CMBIGM estimates

Figure 4: US\$/EUR index and US-Eurozone spread



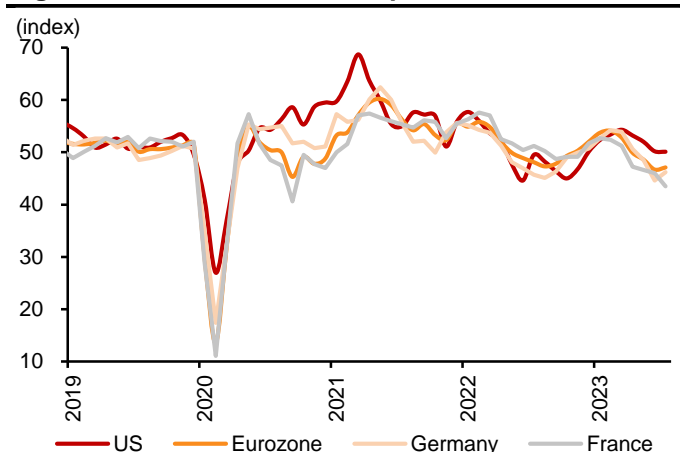
Source: Wind, CMBIGM estimates

Figure 5: US & Eurozone GDP Growth



Source: Wind, CMBIGM estimates

Figure 6: US & Eurozone Composite PMI



Source: Wind, CMBIGM estimates

What factors will influence US\$/RMB rates?

US\$/RMB rates change in tandem with US-Sino differentials in interest rates as they are both determined by the economic asynchronicity or divergence in the two countries. When China’s economy becomes stronger than its US counterpart, the PBOC would adopt a tighter policy than the Fed. US-Sino interest rate differentials and US\$/RMB rates tend to decline. When China’s economy becomes weaker than the US, the PBOC’s policy should be more accommodative than the Fed’s. US-Sino interest rate differentials and US\$/RMB rates tend to increase.

US\$/RMB rates have a stronger correlation with US-Sino short-term interest rate differentials than with long-term ones. Based on our calculation using weekly data in 2014-8M23, the simple correlation coefficients of US\$/RMB rates with 3M Libor-Shibor differentials, US-Sino 2Y T-bond rate differentials and 10Y T-bond rate differentials respectively reached around 0.75, 0.65 and 0.45. If we use annual data in 2007-2022, the simple correlation coefficients were respectively at 0.87, 0.81 and 0.61. Current economic condition determines short-term interest rates as the central bank fixes policy rates, which are often overnight or 7D interbank rates. Long-term rates reflect both current economic condition as well as expectations about future economic prospect. If the expectations are adaptive, current economic condition has a more important influence on long-term rates.

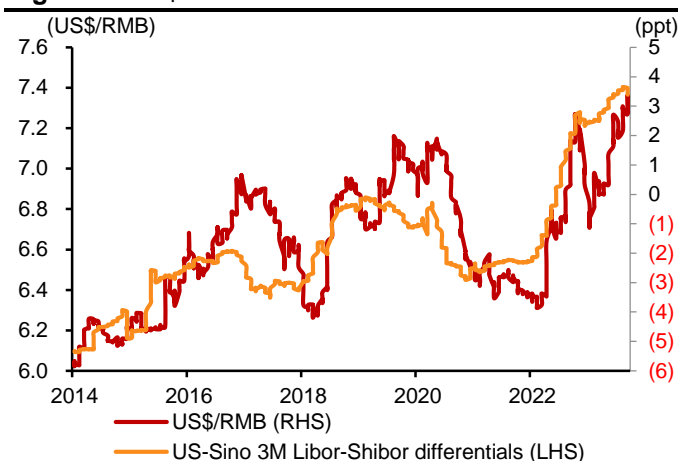
We note a synchronization between 10Y T-bond rates and nominal GDP growth in their moving trend in both the US and China.

Geopolitical risks especially those related to China have an important influence on US\$/RMB rates. US dollar is a safe haven as most global investors think the US is the safest place to invest. Renminbi remains a risky asset in global market. When geopolitical risks increase, US dollar tends to strengthen against renminbi. In particular, geopolitical risks related to China like US-Sino tensions over Chinese Taiwan issue could noticeably weaken renminbi while strengthening US dollar.

There is no sign of direct exchange rate intervention using official FX reserves as the PBOC's FX position has remained stable since 2017. However, the central bank maintains some management over FX market expectations through central parity rate, verbal intervention, FX deposit RRR adjustment and window guidance for large banks. Those policy tools could have some effects in the short term, as there is a mantra in the FX market "don't fight against the central bank". However, they can hardly change the trend of US\$/RMB rates in the medium term, which are determined by economic fundamentals.

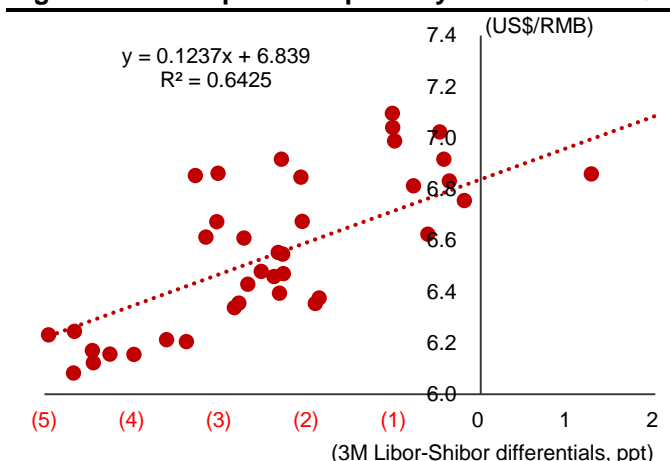
The Mudell-Fleming trilemma indicates one country can only achieve one side of the trilemma triangle with two of the three options (autonomous monetary policy, free capital flow and a fixed exchange rate). The PBOC clearly knows exchange rate flexibility is the key for China to maintain autonomous monetary policy to support domestic economic targets. The PBOC's target is not to change the trend of renminbi, but to avoid possible disorderly overshooting or instability risk in the market. The central bank has some fears of floating as China has a large pool of renminbi savings seeking for diversification and a large number of immature individual investors with severe herding behavior. In addition, Chinese enterprises have foreign currency liability and exchange rate risk management products are not sufficiently developed. To avoid possible capital outflow risks triggered by renminbi depreciation, the PBOC maintains careful management over both capital account and renminbi exchange rate.

Figure 7: US\$/RMB rates & interest differentials



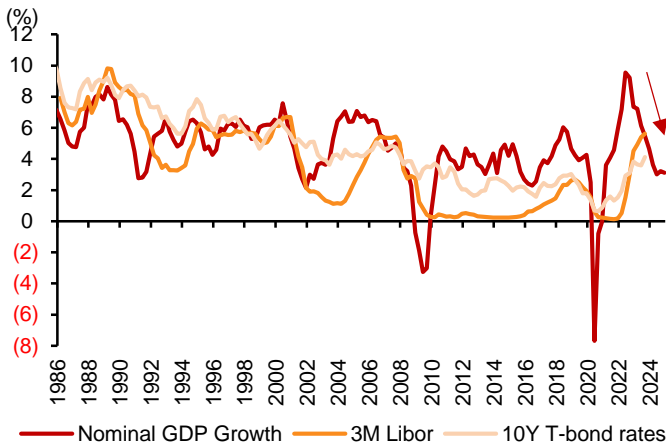
Source: Wind, CMBIGM estimates

Figure 8: Scatter plot with quarterly data in 2015-3Q23



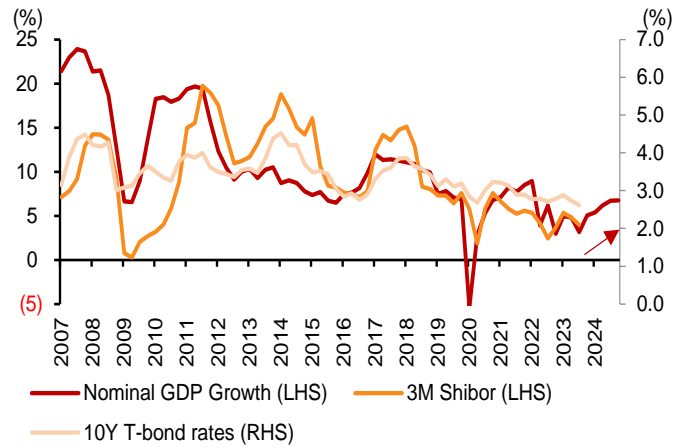
Source: Wind, CMBIGM estimates

Figure 9: US nominal GDP growth and interest rates



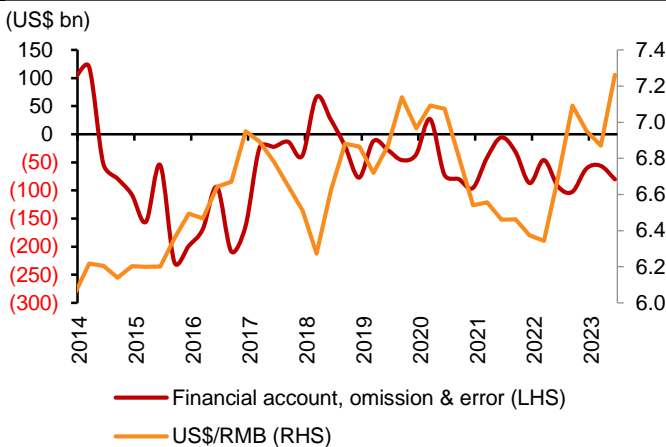
Source: Wind, CMBIGM estimates

Figure 10: China nominal growth and interest rates



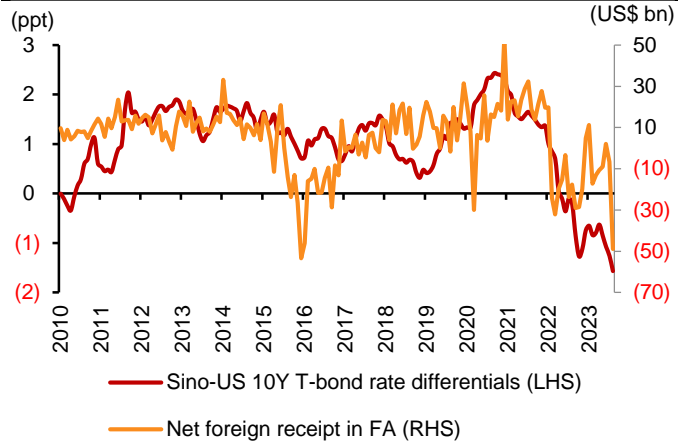
Source: Wind, CMBIGM estimates

Figure 11: US\$/RMB rates & capital flow to China



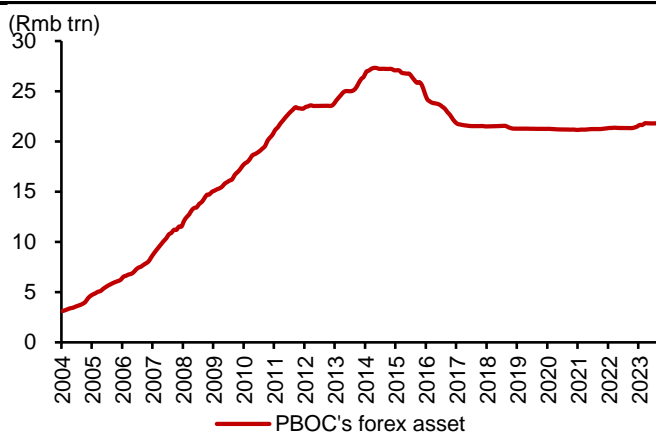
Source: Wind, CMBIGM estimates

Figure 12: Sino-US interest spreads & capital inflow



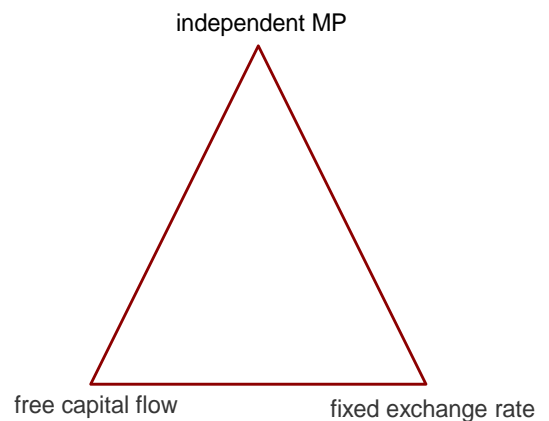
Source: Wind, CMBIGM estimates

Figure 13: PBOC's FX position



Source: Wind, CMBIGM estimates

Figure 14: The Mudell-Fleming trilemma



Source: Wind, CMBIGM estimates

Reasons for strong US dollar & weak RMB in the latest cycle

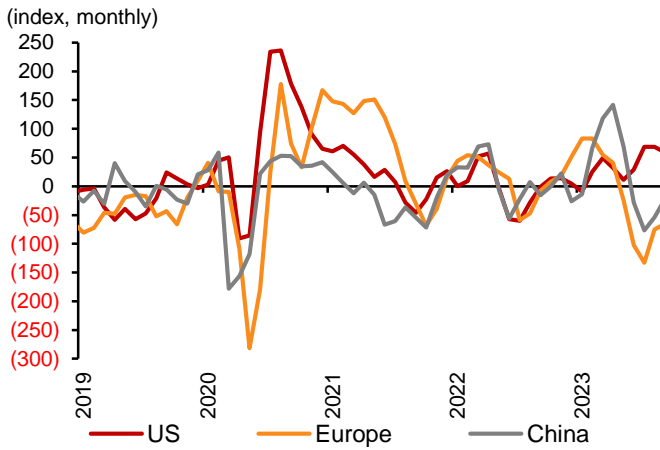
Firstly, the US economy has been stronger than most other economies. US economic growth has continued to beat expectations this year with a decline of recession risk. The labor market has remained tight with stable growth of household income and consumption. Inflation has gradually declined but remained above the Fed's target. The recent Fed meeting indicates higher interest rates for longer in future.

Secondly, Eurozone economy has been weak as its largest economy Germany may see a recession this year. The Russia-Ukraine war has caused supply chain disruptions and stagflation pressure as Eurozone used to rely on Russia for energy supply. The ECB's policy tightening after high inflation has also dampened economic growth in Eurozone. Investors believe Eurozone economy is more fragile to energy inflation and high interest rates than US economy.

Thirdly, China's economy has been weaker than expected as housing market has slumped, business and household confidence has remained low and exports have shrunk. Despite continuous policy loosening, China's housing market continued to slump in summer season. Private business sentiment remained low as manufacturing PMI was still in contractionary range and entrepreneurs were cautious to increase borrowings for capex and employment expansion. Household confidence was also weak as consumption recovered very slowly. China's exports continued to decline as global consumers shifted from goods consumption to service consumption and western countries tried to diversify their supply chains beyond China. China's central bank faces pressure for additional policy rate cut.

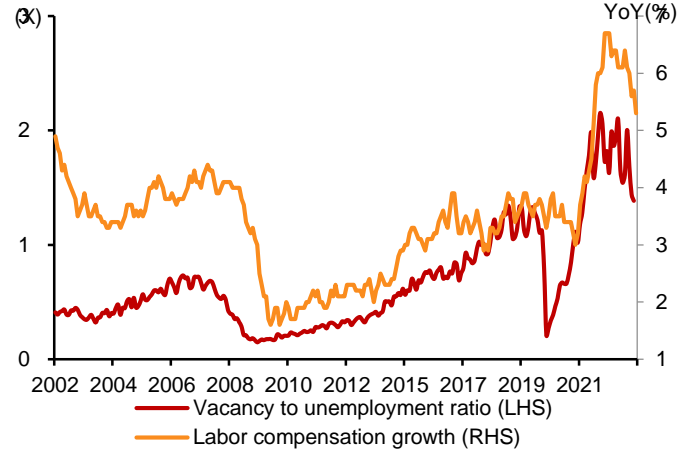
Finally yet importantly, the Russia-Ukraine war and US-Sino tensions over Chinese Taiwan issue have weakened Euro and renminbi by increasing geopolitical risks. The Russia-Ukraine war has worsened economic prospect and security condition in Europe and a flight to safety has dampened Euro while strengthening US dollar. The Russia-Ukraine war has also worsened the relationship between China and western countries and increased investors' concern about geopolitical risks related to Taiwan Strait. Multinational companies accelerated supply chain diversification with "China + 1" strategy while Chinese enterprises and individuals increased outward investment to avoid all eggs in one basket. Both US dollar and gold gained much from the rise of geopolitical risks and the weakening of the Euro after the Russia-Ukraine war. Take gold as an example, the current high gold price includes a premium due to the geopolitical risks and weak Euro. Based on our research, real-term yields of US 10Y T-bonds could explain over 95% of gold price fluctuations in 2018-2021. As the real-term yields rose sharply from -1% at end-2021 to 2.1% in the past few weeks, gold price was supposed to drop from US\$1,800/ounce to below US\$1,000/ounce, but it remained above US\$1,900/ounce.

Figure 15: Citigroup Economic Surprise Index



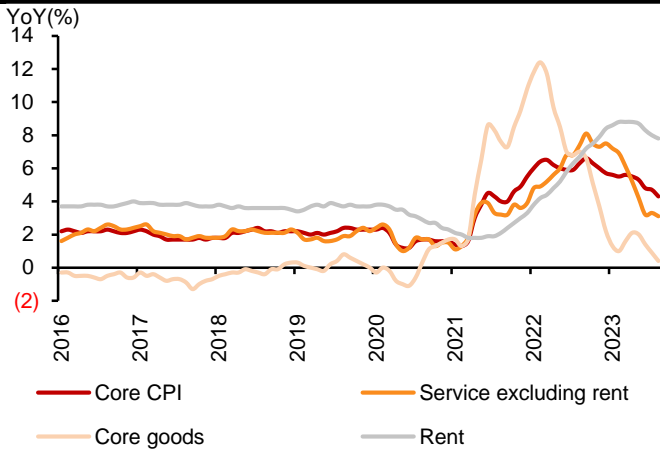
Source: Wind, CMBIGM estimates

Figure 16: US job vacancy ratio and wage growth



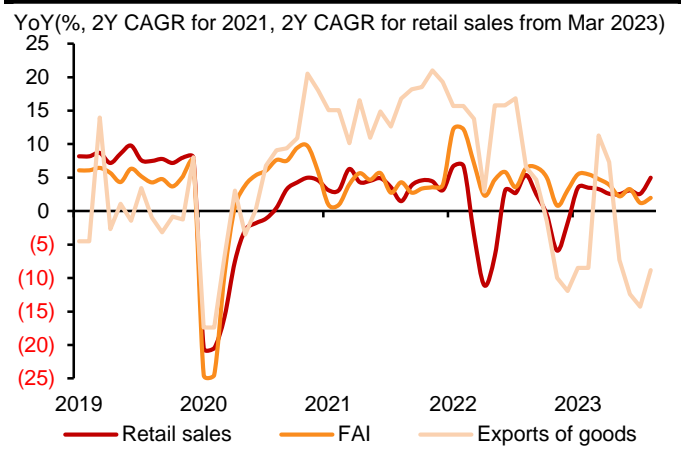
Source: Wind, CMBIGM estimates

Figure 17: US Core CPI Growth



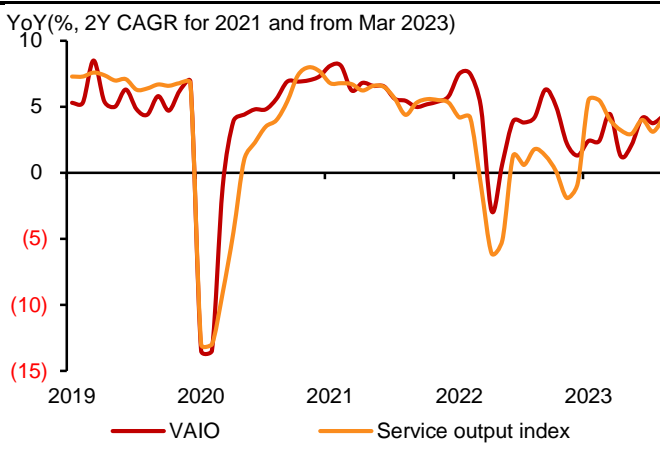
Source: Wind, CMBIGM estimates

Figure 18: China's retail sales, FAI & exports



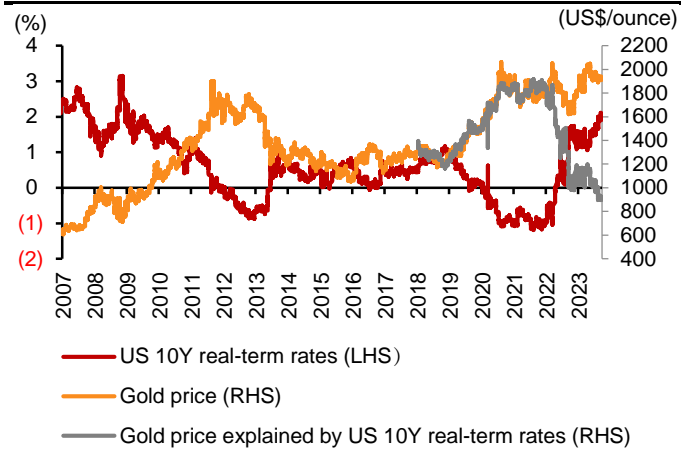
Source: Wind, CMBIGM estimates

Figure 19: China's VAIO & Service output index



Source: Wind, CMBIGM estimates

Figure 20: US 10-Y real-term rates and gold price



Source: Wind, CMBIGM estimates

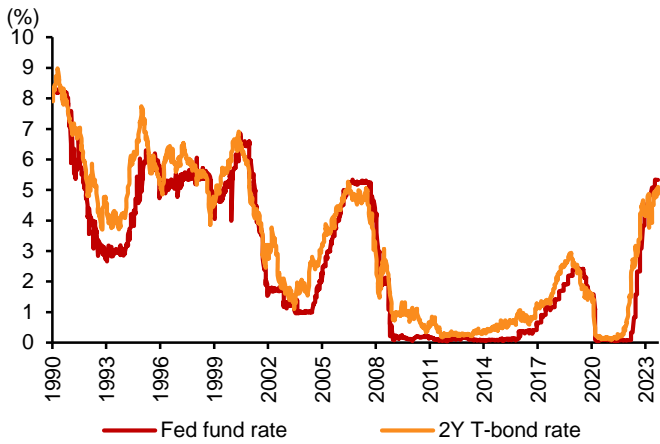
Outlook for US dollar & RMB rates in next four quarters

US dollar is likely to remain strong in next several weeks before possible weakening in 2024. There are two key factors that determine the future trend of US dollar index. One factor is the dynamics of US economic growth and disinflation. US economic growth may remain resilient with CPI YoY growth staying at above 3% in next three months. High interest rates may last for a while. However, sticky inflation, tight labor market and high interest rates will continue to hurt the US economy with rising cost, declining labor productivity and tightening credit condition. US economic growth and inflation is expected to noticeably slow in 2024, when the strong US dollar may face a turning point. The other factor is the dynamics of the Russia-Ukraine war and Eurozone economy. If the Russia-Ukraine war could end in 2024, market sentiment for Eurozone economy and the Euro would be significantly boosted.

Renminbi may remain weak in near term before mild appreciation in 2024. We expect US\$/RMB to reach 7.20 at end-2023 and 7.0 at end-2024. For one thing, US dollar may remain strong in next several weeks before possible weakening in 2024 and renminbi is generally opposite to US dollar in the moving trend. For the other, China's economy may brace for a moderate recovery cycle with a possible improvement of Sino-US relationship in next four quarters. Chinese policymakers will continue to loosen property policies and expand credit supply until the real estate market stabilizes. Meanwhile, employment condition and household confidence may gradually improve as labor-intensive service sectors continue to recover. In addition, Sino-US relationship may see some improvement at least temporarily. Chinese policymakers want to lower geopolitical risks in Taiwan Strait to restore business confidence and reduce capital outflow pressure. US government wants to extend the economic expansion cycle and relieve pressure for businesses by shifting from "decoupling" to "small yard, high fence" on China.

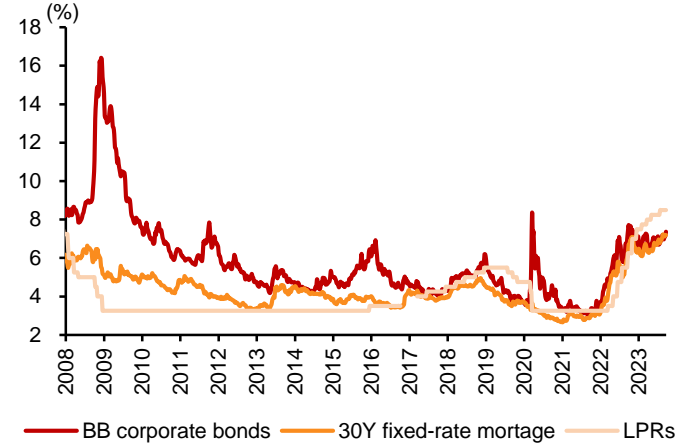
The strong US dollar with high interest rates has severely depressed global financial markets. The discount of emerging market stocks relative to the US stocks has reached historical high. HK stock market has also faced liquidity pressure due to a high proportion of US dollar funds in the market, the linkage of HK dollar interest rates with US dollar interest rates under the linked exchange rate system as well as low risk aversion sentiment amid US-Sino tensions. Hang Seng index has a strong correlation with US\$/RMB rate as they are both influenced by China's business cycle, US dollar liquidity cycle and geopolitical risks especially related to Sino-US relationship. If US dollar could turn weak with rebounds on renminbi in 2024, HK market sentiment will definitely improve.

Figure 21: 2Y T-bond rates precede fed policy rates



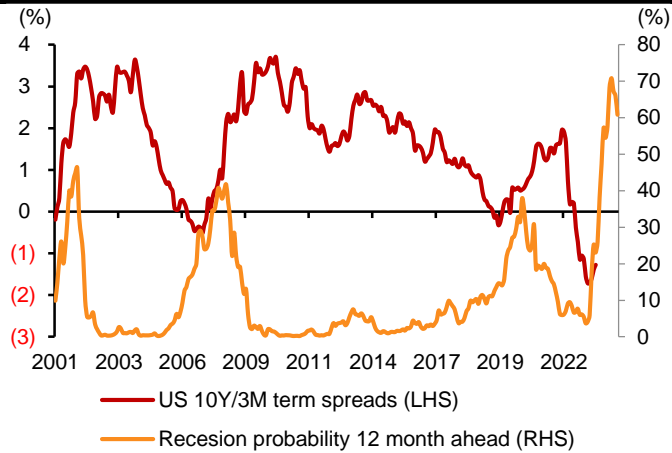
Source: Wind, CMBIGM estimates

Figure 22: Financing costs of US private sector



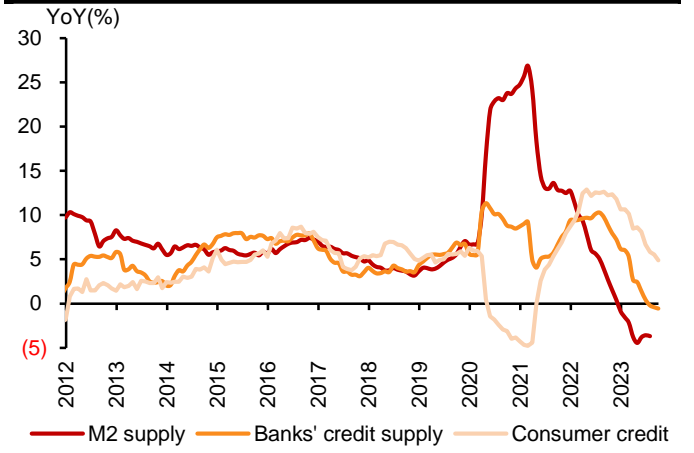
Source: Wind, CMBIGM estimates

Figure 23: US term spreads and recession probability



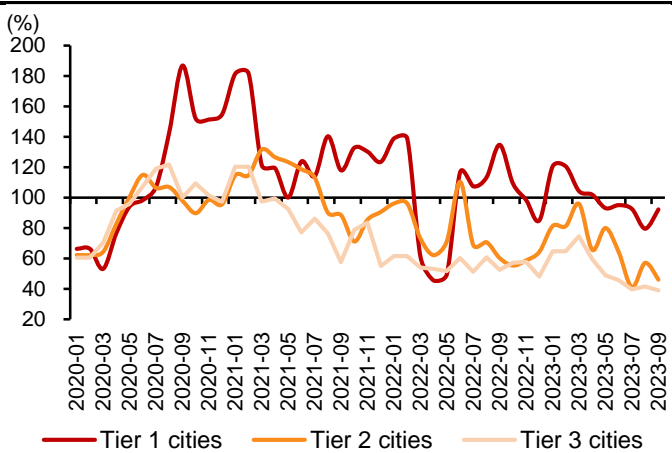
Source: Wind, CMBIGM estimates

Figure 24: US M2 and credit growth



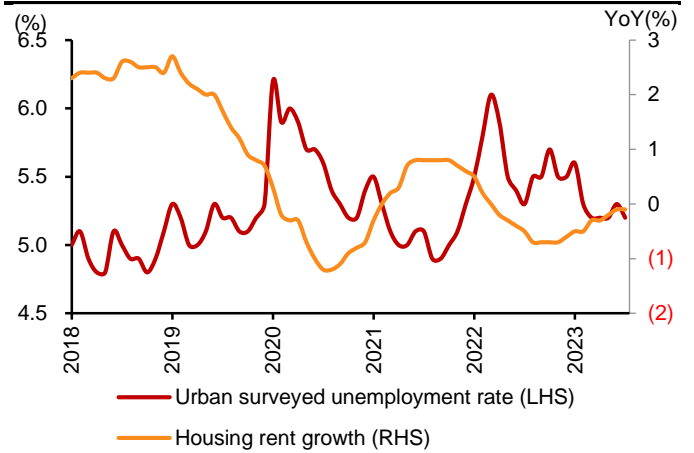
Source: Wind, CMBIGM estimates

Figure 25: China housing sales recovery ratios compared to 2019



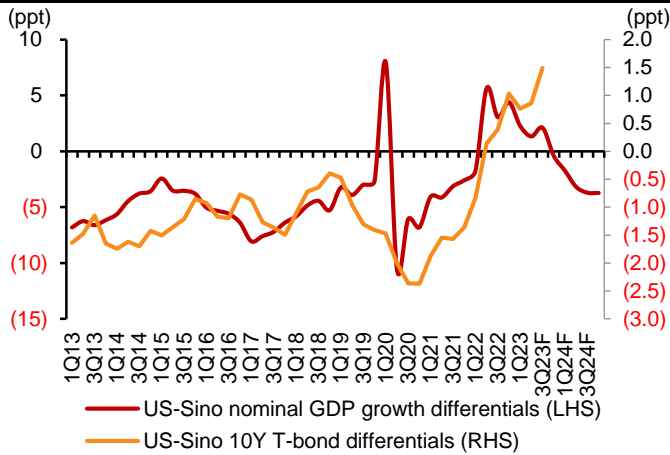
Source: Wind, CMBIGM estimates

Figure 26: China's unemployment rate & housing rent growth



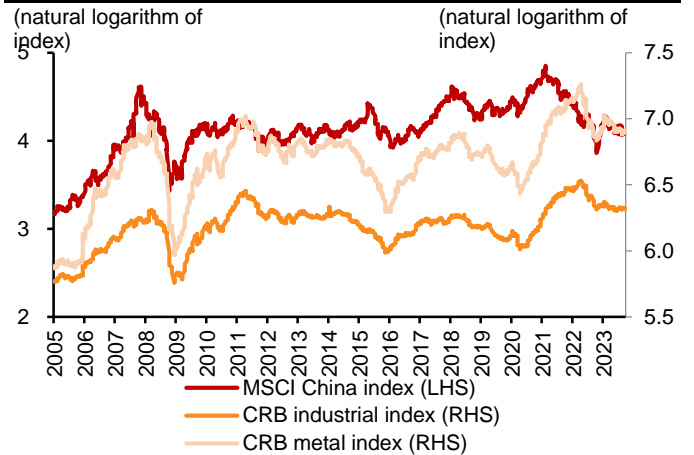
Source: Wind, CMBIGM estimates

Figure 27: US-Sino nominal GDP growth & 10Y T-bond rate differentials



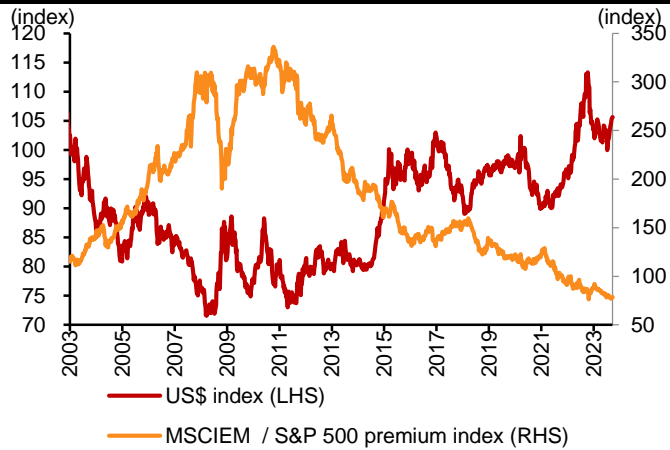
Source: Wind, CMBIGM estimates

Figure 28: MSCI China index & CRB industrial, metal index



Source: Wind, CMBIGM estimates

Figure 29: US Dollar & EM stock premium to US stock



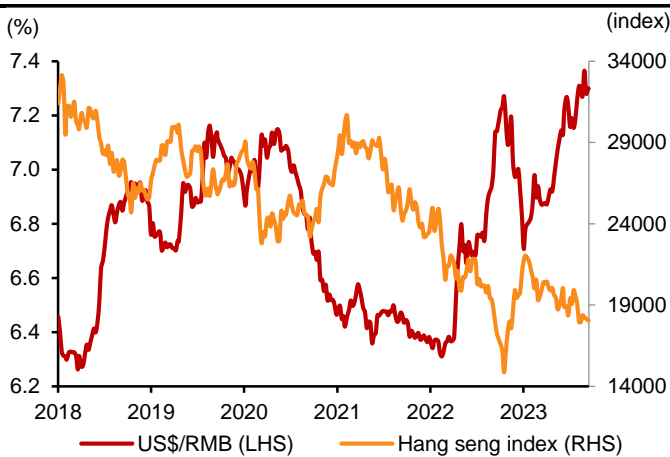
Source: Wind, CMBIGM estimates

Figure 30: US\$/HKD rate & Libor-Hibor differentials



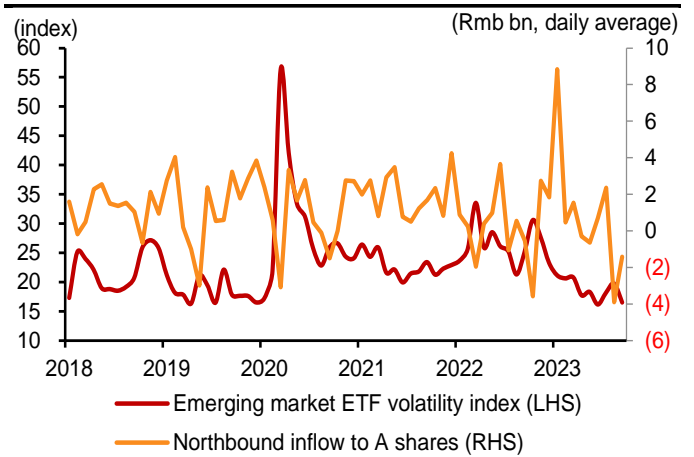
Source: Wind, CMBIGM estimates

Figure 31: Strong correlation between Hang Seng index & US\$/RMB rate



Source: Wind, CMBIGM estimates

Figure 32: EM volatility & northbound inflow to A shares



Source: Wind, CMBIGM estimates

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