

## Asia Economics Analyst

## Progress check on RMB internationalization

- Chinese policymakers accelerated the push for RMB internationalization recently amid increased geopolitical uncertainties. Earlier this year, Brazil and Argentina announced they would allow RMB settlements in trading with China. According to SAFE, in March this year, RMB surpassed the USD for the first time for use in China's own cross-border payments.
- We provide a progress check on RMB internationalization in this report. As a "medium of exchange," RMB has gained market share in international payments, especially in China's cross-border transactions. The share of RMB settlement in China's cross-border payments increased materially to 47% in 2021, almost double the share five years earlier. On the back of foreigners' more active trading of RMB assets, RMB settlement under the capital and financial accounts contributed the most to the rapid increase in RMB cross-border payments in China. However, the usage of RMB in global cross-border payments has grown but remains small in a global context - RMB's global market share increased to 2.5% as of May 2023, from 1.1% by the end of 2013.
- Compared with RMB's progress in functioning as a "medium of exchange" in international markets, RMB is still little used in "store of value" and "unit of account" roles. RMB denominated reserves and international debt remain small in global markets, and very few currencies use RMB as a reference rate in deciding their own exchange rates.
- Use of RMB cross-border payments for portfolio investment is likely to slow in the near term because of unfavorable interest rate spreads and foreign investors' net selling of RMB assets. China's capital account liberalization is likely to be a gradual process, and thus limit the speed of RMB internationalization. Promoting RMB usage in trade settlements and developing RMB offshore markets could be the next key areas for Chinese policymakers to push forward RMB internationalization.

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## Progress check on RMB internationalization

Under the backdrop of increased geopolitical tensions, Chinese policymakers recently accelerated the push for RMB internationalization. Earlier this year, [Brazil](#) and [Argentina](#) announced they would allow RMB settlements in trading with China. According to SAFE, in [March this year](#), RMB surpassed the USD for the first time and became the dominant currency in China's cross-border payments. In this report, we provide a progress check on RMB internationalization.

### Internationalization of a currency

Economically speaking, RMB internationalization could help lower the exchange rate risks in China's international trade flows and cross-border borrowing. It would also help lower China's reliance on the USD amid increased uncertainties in US-China tensions.

Following the "roles of money" ([Exhibit 1](#)), we take a progress check on RMB internationalization. RMB has gained market share and therefore made progress in functioning as a "medium of exchange" in global markets, but progress appears quite slow in its function as a "store of value" and "unit of account". This is likely because China is becoming increasingly important in global goods, services and financial markets, while China's capital controls and the fact that RMB is still not entirely freely tradable could limit RMB's progress in its "store of value" and "unit of account" roles.

**Exhibit 1: RMB gained market share in functioning as the medium of exchange in global markets, but was still little used in roles of "store of value" and "unit of account" globally**

| Roles of money     | Relevant indicators   | 2011  | 2016 | 2021 |
|--------------------|---|---|------|------|
| Medium of Exchange | RMB share in international payments (%)                     | 0.3   | 1.9  | 2.2  |
|                    | RMB share in global FX turnover (%)*                        | 0.9   | 4.0  | 7.0  |
| Store of Value     | RMB denominated assets in global reserve allocation (%)     | 0.0   | 1.0  | 3.0  |
|                    | RMB denominated debt share in international debt market (%) | 0.2   | 0.5  | 0.4  |
| Unit of Account    | RMB quoted prices in international markets                  | Dual currency counter in HK Stock Exchange (2023) |      |      |
|                    | Anchor for pegging currency                                 | SGD NEER, IMF SDR (since 2015)                    |      |      |

\* We showed 2010, 2016 and 2022 data for this row

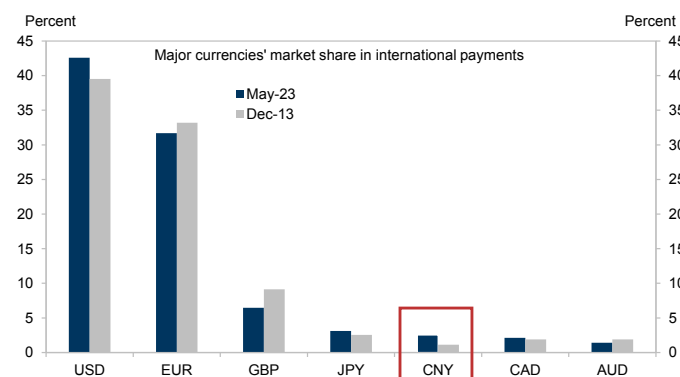
Source: BIS, Haver Analytics, Data compiled by Goldman Sachs Global Investment Research

### Medium of exchange

#### RMB share in international payments

SWIFT data suggest RMB share in international payments rose from 1.1% by the end of 2013 to 2.5% in May 2023. USD remains the dominant currency in international payments - 43% of international payments were denominated in USD, 32% in EUR, 7% in GBP, and 3.2% in JPY. ([Exhibit 2](#))

### Exhibit 2: CNY's market share in international payments doubled from 2013 to 2023 but the level remained low

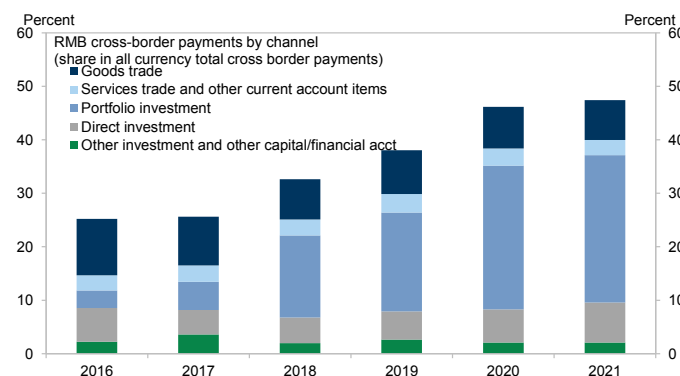


Source: Wind, Goldman Sachs Global Investment Research

### RMB in China's cross-border payments

While RMB only made small progress in global international payments, its progress in China's cross-border payments has been fast. RMB surpassed USD in March 2023 and became the dominant currency. The increase in RMB cross-border payments was mainly due to more active foreign trading of RMB denominated securities - cross-border RMB payments related to portfolio investment (i.e., stock and bond investments) were RMB21 trillion, while total current account cross-border payments (goods and services trade included) were only RMB 7.9 trillion in 2021. [A shares](#) and [onshore RMB bonds](#) have been included in major global equity and bond indexes respectively since 2018, which contributed to the higher RMB cross-border payments related to portfolio investment ([Exhibit 3](#)).

### Exhibit 3: Portfolio investment-related payments drove the rapid increase in China's overall cross-border RMB payments in recent years



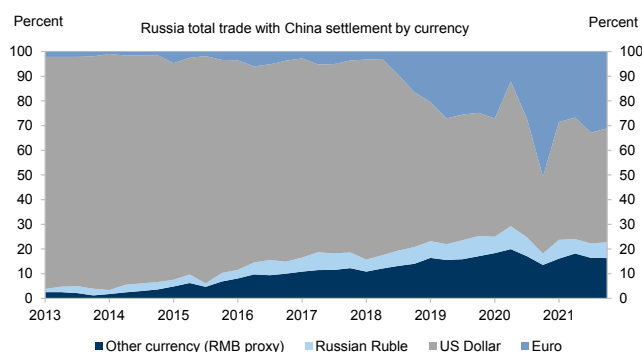
Source: SAFE, Haver Analytics, Goldman Sachs Global Investment Research

### Goods and services trade-related cross-border RMB payments

As a share of total goods and services trade, RMB-settled trade rose to 19.8% as of Q3 2022, 5.8pp higher than 10 years ago. The higher usage of RMB in China's cross border payments for trade seems to be relatively broad-based and goes beyond Russia's

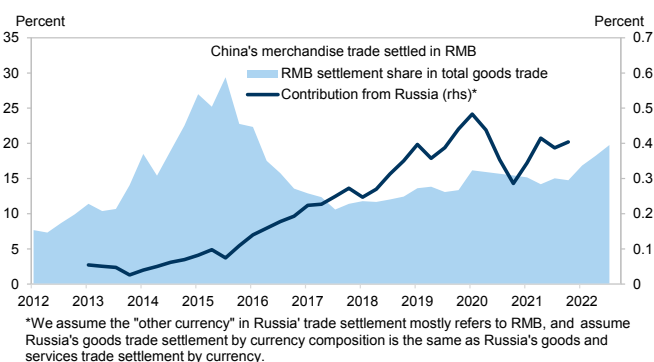
increased use of RMB. Russia's usage of RMB in trading with China has increased significantly since 2014 when US imposed strict sanctions on Russia after Russia's occupation of Crimea. While the central bank of Russia does not release data on RMB settlements specifically, we assume "other currency" mainly consists of RMB ([Exhibit 4](#), [Exhibit 5](#)). The share of "other currency" in Russia's imports from China rose to 26.8% in 2021 from 2.2% in 2013. However, given Russia's total trade with China was relatively small in China's total trade- at RMB 910bn in 2021 - Russia's increased usage of RMB implied around RMB140bn higher RMB settlement in 2021 vs 2013, and thus contributed to only around 0.3pp increase in RMB share in China's total goods trade settlement in 2021 vs 2013.

**Exhibit 4: Russia has used more RMB in its trade settlements with China since US sanctions in 2014**



Source: SAFE, Haver Analytics, Goldman Sachs Global Investment Research

**Exhibit 5: ...although Russia's contribution to the share of RMB settlements in China's total trade was relatively small**

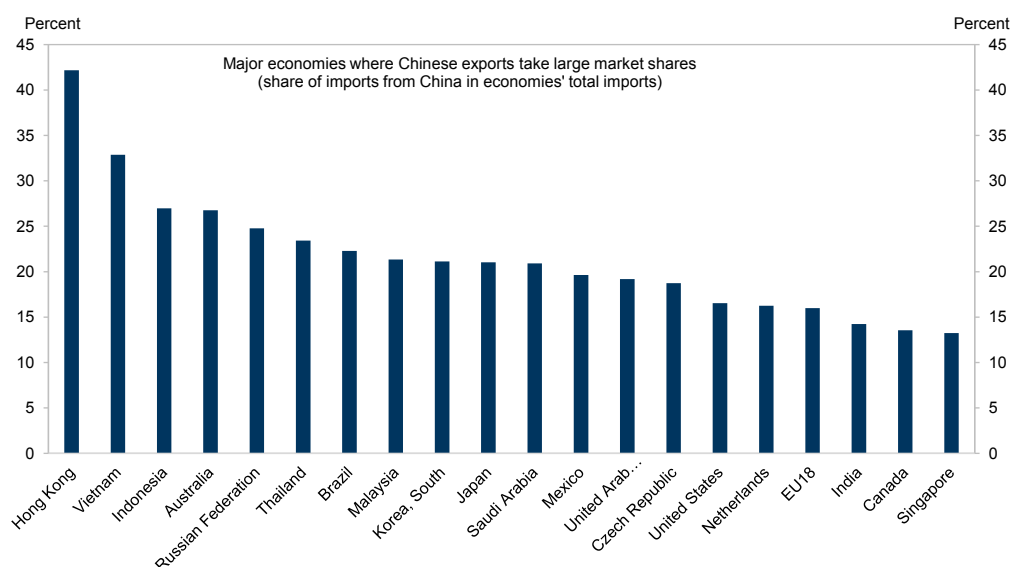


Source: PBOC, CEIC, Haver Analytics, Goldman Sachs Global Investment Research

China and Brazil's recent joint statement allowed (not required) the two countries to trade in local currencies. Brazil's exports to China (USD88bn in 2021) mainly consist of commodities which are mostly settled in USD. For Brazilian exporters to accept RMB payments, we think the RMB would need to be recycled by Brazilian importers purchasing Chinese goods. Brazil's total imports from China were USD51bn in 2021. We estimate 20%/50%/100% of RMB settlement for Brazil's total imports from China would increase RMB settlement share in China's total goods trade settlement by 0.2/0.5/0.9pp respectively. For this channel to increase the RMB share of China's total goods trade settlement materially, China would need to have RMB settlement agreements with more trading partners than just Brazil.

[Exhibit 6](#) shows major economies in the world in which Chinese exports have high market share, and therefore these economies might be more willing to use RMB to settle imports from their Chinese counterparties. However, given China's capital controls, the shortage of offshore RMB liquidity becomes a constraint for these partners to settle trade in RMB. To facilitate more usage of RMB in trade settlements, PBOC has extended bilateral swap lines with many economies in the world, while among major trading partners of China, many economies have existing bilateral swap line with the PBOC. (see appendix for more details).

### Exhibit 6: Hong Kong, Vietnam and Indonesia are the top three economies where Chinese exports take high market shares

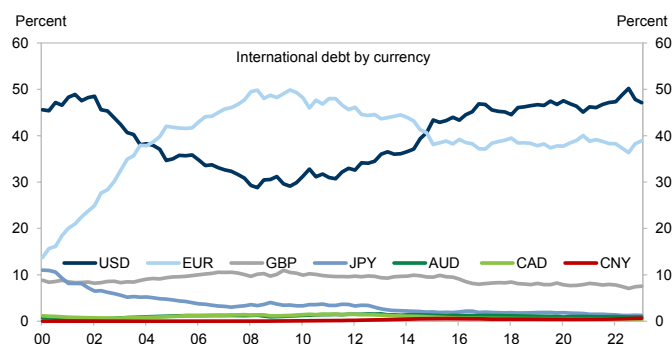


Source: Haver Analytics, Goldman Sachs Global Investment Research

### Store of value

Compared with RMB's progress in functioning as a "medium of exchange" in international markets, RMB is still little used as a "store of value". Specifically, in international debt markets, debt securities denominated in RMB were only around 0.7%, according to BIS data, in comparison to 0.4% ten years ago. RMB denominated reserves accounted for around 3% of global reserves, higher than the 1% in 2016 but remained low in absolute levels. (Exhibit 7)

### Exhibit 7: RMB denominated international debt remains a small share of the overall international debt market



Source: BIS

### Unit of Account

#### Anchor for other currencies

- RMB was officially included in the SDR basket in 2016. The current weight for RMB

in SDR is around 12.3%. There are only around USD 943bn reserves held in SDR after the most recent allocation of USD650bn in 2021 to boost global liquidity.

- Singapore manages its exchange rate against a basket of currencies of its major trading partners. While Singapore does not release the specific composition of this basket of currencies, we estimate RMB likely has a 16% weight in the basket.
- There are no other currencies explicitly pegged to the RMB.

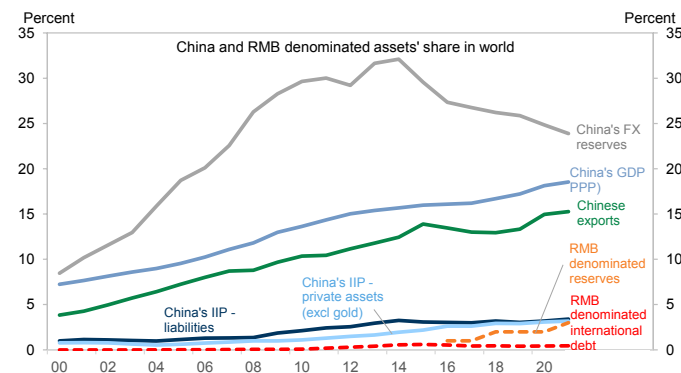
### **RMB denominated products offshore - Hong Kong being the offshore RMB center**

A wide range of RMB assets are available in Hong Kong for global investors. These include dim-sum bonds (RMB denominated bonds issued in Hong Kong), RMB-denominated investment funds, commodity-linked products, exchange traded funds (ETFs), real estate investment trusts (REITs), equities and insurance products. The Hong Kong securities market saw the first RMB bond listing on 22 October 2010. This was followed by the first RMB REIT in 2011, and by the first RMB ETF (on gold), the first RMB equity and the first RMB warrant in 2012. The total number of RMB securities listed in HK reached a peak in 2015 (2% of total securities listed in HK Exchange Main Board), but have declined since, and year-to-date this year, the total number of RMB securities was around 1.2% of the total number of securities listed on the HK Exchange Main Board.

In June 2023, HKEX introduced the HKD-RMB Dual Counter Model ("Model") to the secondary market for trading and settlement purposes. This set-up allowed investors to trade selected stocks in RMB directly, in addition to HKD. The initial list of stocks include companies like Tencent, Alibaba and Baidu. HK CNH deposits declined from the peak of more than RMB 1 trillion to around RMB 800bn recently.

In sum, the usage of RMB as "medium of exchange" in international markets has increased, but as a "store of value" and "unit of account" RMB is still little used. In addition, the higher usage of RMB in international transactions was mostly through China's own cross border payments, while among third party markets the usage of RMB is limited. Compared with China's share in global GDP, merchandise trade, international investment position-assets/liabilities, or China's currency reserves as a proportion of global reserves, RMB denominated reserves still remain very low. Our global team's research also suggest the "de-dollarization" trend appeared to be mostly contained to a few notable cases, which accounts for a large part of the decline in Dollar reserves in 2018.

**Exhibit 8: RMB denominated reserves' share of global reserves has been much lower than China's share in global trade and investment positions**



Source: External Wealth of Nations, Haver Analytics, Goldman Sachs Global Investment Research

## Constraints on increasing RMB cross-border usage

### Capital controls

Exhibit 9 summarizes different channels of cross-border RMB flows. Chinese policymakers have set up multiple quota-based programs to allow mutual access between the capital markets of mainland China and Hong Kong/overseas. Besides capital market access, payments related to current account, capital and financial accounts require supporting documents and sometimes approval by the SAFE. RMB cross-border flows are therefore still restricted by China's capital control measures and RMB is not entirely freely tradable.

**Exhibit 9: Cross-border RMB flows are still restricted by China's capital control measures**

| Channel for RMB cross-border payments     | Description  | Total flows in 2021 (RMB bn)   |
|---|--|--|
| <b>Current account related payments</b>   | Using RMB directly as cross-border settlement in current account related trade and transfers   | 7,940  |
| <b>Direct investment related payments</b> | Using RMB directly as cross-border settlement in direct investment related deals and transfers   | 5,800  |
| <b>Cross-border financing</b>             |  |  |
| <b>Cross-border loans</b>                 | Domestic and foreign banks providing trade credits or other types of loans to non-bank institutions  | 527 (outstanding amount)   |
| <b>Cross-border bond issuance</b>         | Financing through direct issuance of CNH bonds   | 353 (outstanding amount)   |
| <b>Access through financial markets</b>   |  |  |
| <b>CIBM</b>                               | Foreign institutional investors trade onshore Chinese bonds  | 7765*  |
| <b>RQFII</b>                              | Qualified foreign institutional investors trade Chinese securities   | 3180   |
| <b>RQDII</b>                              | Qualified domestic institutional investors trade overseas RMB denominated securities   | n.a.   |
| <b>Stock Connect</b>                      | Mutual stock market access between China onshore and offshore investors  | 1930   |
| <b>Bond Connect</b>                       | Mutual bond market access between onshore and offshore investors   | flows: 7765* (500bn quota for southbound channel, no quota for northbound channel) |
| <b>Swap Connect</b>                       | Mutual interest rate swap market access between onshore and offshore investors   | 20 (daily quota)   |
| <b>Wealth Management Connect</b>          | The connect scheme allows eligible Mainland, Hong Kong and Macao residents in the Guangdong-Hong Kong-Macao Greater Bay Area ("GBA") to invest in wealth management products distributed by banks in each other's market through a closed-loop funds flow channel established between their respective banking systems | 0.486  |

\* Total bond investment cross-border RMB flows were RMB 15.5 trillion, and we assumed bond connect vs CIBM channel each contributed around 50% of the flows

Source: PBOC, SAFE

**Lack of investable RMB assets offshore**

Looking back at the experiences of the US dollar, Euro and Japanese Yen, the extensive circulation of a currency in international markets paves the way for internationalization of the currency. The offshore USD market accounts for more than 25% of global dollar funding. Offshore Euro denominated loans and deposits also accounted for close to 20% of overall Euro denominated loans and deposits. In comparison, offshore RMB loans and deposits were around RMB 2 trillion (2021 data), only around 0.5% of total RMB loans and deposits onshore. The lack of investable RMB assets offshore and the capital control to access onshore capital markets and financial system therefore would limit RMB internationalization progress.

**Unfavorable interest rate spread between China and major developed markets**

Increased geopolitical uncertainties could potentially support RMB internationalization if global investors and reserve managers decide to diversify their portfolios. Our [previous research](#) suggests RMB denominated bonds offer diversification benefits to global



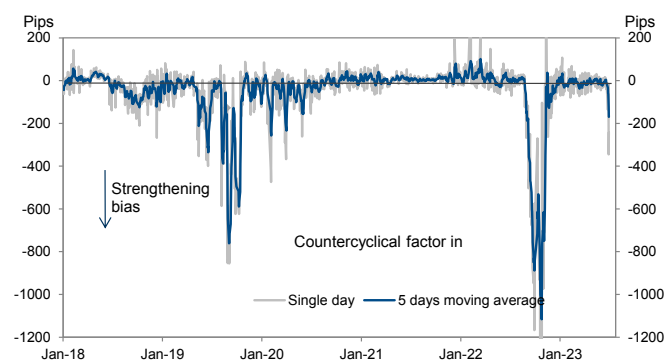
reserve managers who hold a majority of their portfolio in developed markets' currencies. However, the currently unfavorable interest rate spread between China and major developed markets might lower investors' incentive for holding more RMB assets. We expect continued portfolio investment outflows this year, though the magnitude of the outflow is likely to be smaller than 2022.

In recent weeks, the RMB has depreciated against the USD amid disappointing economic data, and China's monetary policy easing. RMB exchange rate had been more market driven in recent years - PBOC suspended the countercyclical factor in October 2020, and removed the reserve requirement for FX forward sales. However, as RMB continued to demonstrate one-way, relatively rapid depreciation, policymakers appeared to have restarted the countercyclical factor in recent days (Exhibit 10). Additional measures such as adjusting reserve requirement for FX forward sales might follow should RMB continue to depreciate relatively rapidly. We also noticed previously that commercial banks' net external assets rose along with inflow pressures in China.

Due to the factors discussed above, RMB internationalization is unlikely to proceed in a straight line. China's capital account liberalization is likely to be a gradual process. RMB cross-border payments via portfolio investment might stall for some time because of unfavorable interest rate spreads (Exhibit 11). Meanwhile, we saw policymakers accelerate the push for using RMB in China's trade settlement, and continue building offshore RMB centers.

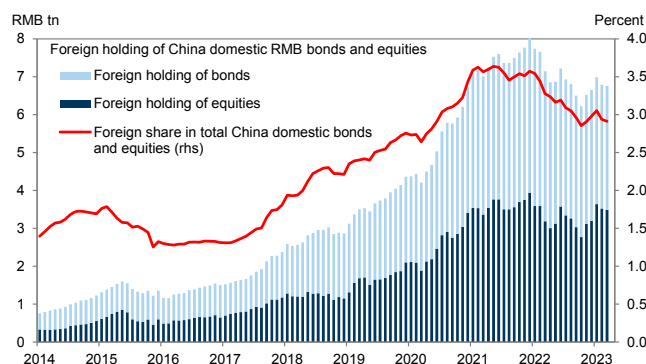
*\*We thank Sabrina Luk, the intern in Asia Economics team, for her contribution.*

**Exhibit 10: PBOC leaned against depreciation in recent days through more negative countercyclical factors in the CNY fixing**



Source: Bloomberg, Data compiled by Goldman Sachs Global Investment Research

**Exhibit 11: Foreign investors reduced their holdings of RMB bonds and equities in recent months**



Source: CEIC, Goldman Sachs Global Investment Research

## Appendix: Current and former PBOC swap line arrangements

| Existing/Expired | Partner country | Start date | Tenor (year) | Amount (RMB bn) | Partner's market share in China trade | China's market share in partner trade |
|------------------|-----------------|------------|--------------|-----------------|---------------------------------------|---------------------------------------|
| Existing         | ECB             | 10/10/2022 | 3            | 350             | 13.40%                                | 6.44%                                 |
| Existing         | South Korea     | 10/22/2020 | 5            | 400             | 5.76%                                 | 21.93%                                |
| Existing         | Japan           | 10/25/2021 | 3            | 200             | 5.66%                                 | 20.29%                                |
| Existing         | Hong Kong       | 7/4/2022   | Long term*   | 800             | 4.91%                                 | 46.43%                                |
| Existing         | Malaysia        | 7/12/2021  | 3            | 180             | 3.24%                                 | 17.10%                                |
| Existing         | Russia          | 11/23/2020 | 3            | 150             | 2.98%                                 | 16.98%                                |
| Existing         | Indonesia       | 1/27/2022  | 3            | 250             | 2.36%                                 | 24.87%                                |
| Existing         | Thailand        | 1/8/2021   | 5            | 70              | 2.14%                                 | 17.95%                                |
| Existing         | Singapore       | 7/13/2022  | 5            | 300             | 1.83%                                 | 12.80%                                |
| Existing         | UK              | 11/12/2021 | 5            | 350             | 1.64%                                 | 8.98%                                 |
| Existing         | Canada          | 1/13/2021  | 5            | 200             | 1.52%                                 | 8.26%                                 |
| Existing         | Chile           | 8/20/2021  | 3            | 50              | 1.07%                                 | 30.80%                                |
| Existing         | South Africa    | 9/13/2021  | 3            | 30              | 0.90%                                 | 14.09%                                |
| Existing         | Turkey          | 6/4/2021   | 3            | 35              | 0.61%                                 | 1.06%                                 |
| Existing         | Qatar           | 1/6/2021   | 3            | 35              | 0.42%                                 | 11.07%                                |
| Existing         | Pakistan        | 7/13/2021  | 3            | 30              | 0.42%                                 | 16.62%                                |
| Existing         | New Zealand     | 8/22/2020  | 3            | 25              | 0.40%                                 | 25.20%                                |
| Existing         | Nigeria         | 6/9/2021   | 3            | 15              | 0.38%                                 | 12.47%                                |
| Existing         | Argentina       | 6/9/2023   | 3            | 130             | 0.34%                                 | 15.09%                                |
| Existing         | Hungary         | 9/17/2020  | 3            | 40              | 0.24%                                 | 4.10%                                 |
| Existing         | Austria         | 7/6/2021   | 3            | 200             | 0.21%                                 | 3.41%                                 |
| Existing         | Mongolia        | 7/31/2020  | 3            | 15              | 0.19%                                 | 64.41%                                |
| Existing         | Sri Lanka       | 3/19/2021  | 3            | 10              | 0.07%                                 | 12.06%                                |
| Existing         | Iceland         | 10/19/2020 | 3            | 3.5             | 0.01%                                 | 6.17%                                 |
| Expired          | Brazil          | 3/26/2013  | 3            | 190             | 1.06%                                 | 24.08%                                |
| Expired          | UAE             | 12/14/2014 | 3            | 35              | 0.65%                                 | 6.83%                                 |
| Expired          | Switzerland     | 7/21/2017  | 3            | 150             | 0.36%                                 | 5.01%                                 |
| Expired          | Kazakhstan      | 12/24/2019 | 1            | 7               | 0.35%                                 | 18.34%                                |
| Expired          | Ukraine         | 12/10/2018 | 3            | 15              | 0.29%                                 | 19.04%                                |
| Expired          | Egypt           | 2/10/2020  | 3            | 18              | 0.29%                                 | 10.32%                                |
| Expired          | Laos            | 5/20/2020  | 3            | 6               | 0.09%                                 | 19.55%                                |
| Expired          | Morocco         | 5/11/2016  | 3            | 10              | 0.08%                                 | 6.73%                                 |
| Expired          | Macau           | 12/5/2019  | 3            | 30              | 0.07%                                 | 27.82%                                |
| Expired          | Uzbekistan      | 4/19/2011  | 3            | 0.7             | 0.06%                                 | 18.68%                                |
| Expired          | Belarus         | 5/10/2018  | 3            | 7               | 0.06%                                 | 6.25%                                 |
| Expired          | Tajikistan      | 9/3/2015   | 3            | 3               | 0.02%                                 | 13.42%                                |
| Expired          | Albania         | 4/3/2018   | 3            | 2               | 0.01%                                 | 6.08%                                 |
| Expired          | Armenia         | 3/25/2015  | 3            | 1               | 0.01%                                 | 12.44%                                |
| Expired          | Suriname        | 2/11/2019  | 3            | 1               | 0.01%                                 | 4.69%                                 |
| Expired          | Serbia          | 6/17/2016  | 3            | 1.5             | 0.00%                                 | 8.76%                                 |

\*Currency swap agreement between the PBOC and HKMA acts as an RMB liquidity facility to facilitate offshore CNH liquidity.

Source: PBOC, Data compiled by Goldman Sachs Global Investment Research

# Disclosure Appendix

## Reg AC

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