

Research Note

Developments in the Interest Rate Derivatives Markets in Mainland China and Hong Kong

This report analyzes interest rate derivatives (IRD) trading activity reported in mainland China and Hong Kong. It examines renminbi (RMB)-denominated IRD, before looking more broadly at Hong Kong's position as a derivatives trading hub.

EXECUTIVE SUMMARY

Mainland China's RMB IRD market (CNY swaps) has expanded significantly since 2022, with total traded notional growing by 47.2% to \$4.5 trillion in 2024 from \$3.1 trillion in 2022¹. This growth was driven by key regulatory milestones, including implementation of the Futures and Derivatives Law (FDL) and the launch of Swap Connect. The FDL's recognition of close-out netting spurred institutional participation, while Swap Connect enabled international investors to access the onshore market.

Hong Kong's RMB IRD market (which consists of CNH swaps and CNY non-deliverable swaps) increased by 37.5%, with traded notional rising to \$12.0 trillion in 2024 from \$8.7 trillion in 2023. As discussed in more detail in this report, there are several factors in Hong Kong's reporting rules (duplicate reporting of alpha and cleared trades and intragroup transactions) that affect the level of trading volumes reported in the jurisdiction. The share of RMB-denominated IRD traded notional in Hong Kong overall grew to 10.2% in 2024², much of which is believed to be non-deliverable interest rate swaps (IRS) denominated in CNY.

The broader Hong Kong IRD market rebounded in 2024, reaching \$117.9 trillion in traded notional from \$27.6 trillion in 2016³. There has been a shift to overnight index swaps (OIS), driven by the transition from interbank offered rates (IBORs) to alternative reference rates. OIS accounted for 53.0% of IRD traded notional in Hong Kong in 2024, up from 19.1% in 2016.

¹ All mainland China Foreign Exchange Trade System (CFETS) interest rate derivatives (IRD) data is sourced from www.chinamoney.com.cn/english/mdtrptmb/, with data availability beginning in 2022

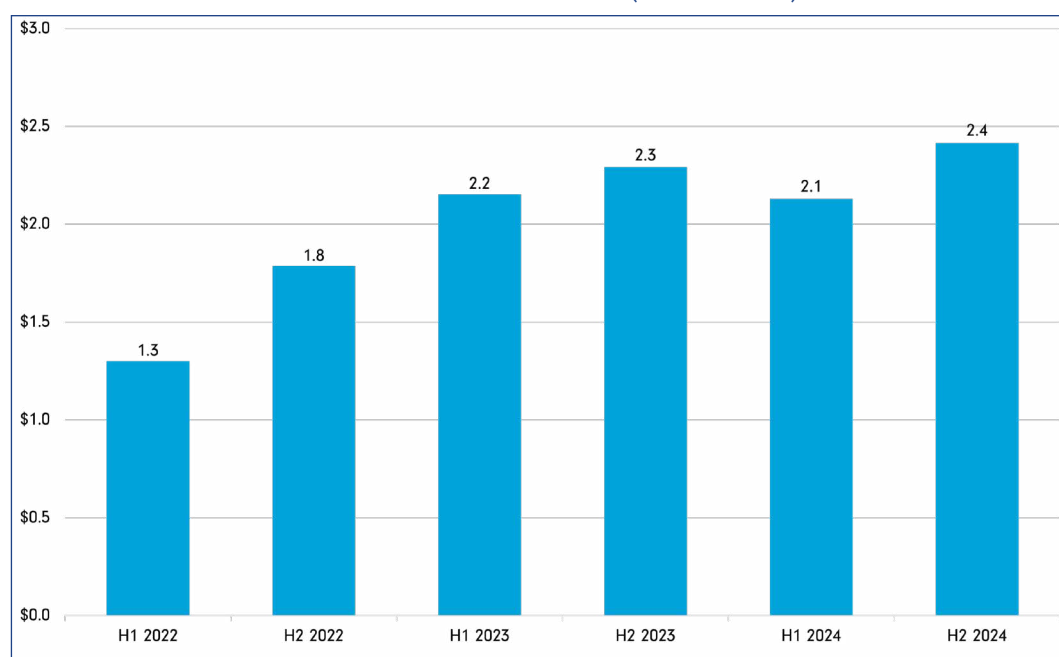
² All Hong Kong Trade Repository data is sourced from the Hong Kong Monetary Authority <https://hktr.hkma.gov.hk/ContentDetail.aspx?pageName=Data-Disclosure>

³ Hong Kong Trade Repository

ONSHORE IRD TRADING ACTIVITY

Mainland China's onshore RMB IRD market, reported by the China Foreign Exchange Trade System (CFETS)⁴, has increased by 47.2% since 2022 – the first-year statistics are available⁵. Traded notional rose significantly from \$3.1 trillion in 2022 to \$4.4 trillion in 2023 (+43.9%), and then more modestly to \$4.5 trillion in 2024 (+2.3%)⁶ (see Chart 1).

Chart 1: Mainland China IRD Traded Notional (US\$ trillions)



Source: CFETS

Over shorter time horizons, trading activity has exhibited notable fluctuations. Following implementation of the Futures and Derivatives Law (FDL) in August 2022, quarterly traded notional exceeded \$880 billion in both the third and fourth quarters of 2022⁷. Traded notional rose to \$1.2 trillion by the first quarter of 2023, with fixing repo rate (FR007) swaps leading the increase – up by 74.4% year-on-year to \$1.1 trillion from \$606.7 billion.

Close-out netting recognition under the FDL likely spurred early institutional participation by creating a more secure and transparent framework for trading, clearing and settlement⁸, helping to boost traded notional.

This was followed by the launch of Swap Connect in May 2023, which links Hong Kong with mainland China so international investors can trade and clear onshore RMB IRD (see box, *About CFETS and Swap Connect*). This helped fuel mainland China's 43.9% growth in traded notional to \$4.4 trillion in 2023, up from \$3.1 trillion in 2022.

⁴ All CFETS IRD data is sourced from www.chinamoney.com.cn/english/mdtrptmbl/

⁵ For more information on CFETS, see box, About CFETS and Swap Connect

⁶ Trade turnover, as reported by the Bank for International Settlements (BIS) in its last triennial survey in 2022, is consistent with CFETS data. Triennial Central Bank Survey of Foreign Exchange and Over-the-counter (OTC) Derivatives Markets in 2022 www.bis.org/statistics/rpfx22.htm

⁷ China progresses with Futures and Derivatives Law implementing rules www.fia.org/marketvoice/articles/china-progresses-futures-and-derivatives-law-implementing-rules

⁸ Quiet Reformation www.isda.org/a/8kITE/IQ-ISDA-Quarterly-article-by-Habib-Motani-on-Close-out-Netting-February-2021.pdf

Although growth in traded notional eased in early 2024, activity picked up in the latter part of the year. IRD traded notional reported to CFETS rose by 13.4% to \$2.4 trillion in the second half of 2024 from \$2.1 trillion in the first six months of the year, reflecting regulatory enhancements and market liberalization measures.

About CFETS and Swap Connect

CFETS is an onshore hub for interbank foreign exchange (FX) and rates activity. It provides execution, confirmation, reporting and post-trade services for over-the-counter (OTC) IRD, FX, money-market and fixed-income products⁹. All authorized interbank participants – commercial and policy banks, licensed foreign banks and approved non-banks – must route or report their OTC IRD through CFETS, giving regulators visibility into risk, liquidity and market depth¹⁰.

Swap Connect is a cross-border IRD trading program that allows offshore investors (primarily in Hong Kong) to access and trade onshore RMB IRS in mainland China. Launched in May 2023, it operates a ‘northbound’ model, enabling offshore institutional investors to hedge their RMB bond investments using onshore IRS via a pre-approved trading and clearing link between Hong Kong and mainland infrastructure – namely, CFETS (trading) and the Shanghai Clearing House (SHCH)/ Hong Kong Exchanges and Clearing Limited (clearing)¹¹. Mainland transactions are reported to CFETS and Hong Kong transactions are reported to the Hong Kong Trade Repository (HKTR), establishing a built-in dual-reporting framework¹².

Reporting implications: A Swap Connect IRS booked on CFETS is still a specified OTC derivatives transaction under HKTR reporting rules¹³. Any Hong-Kong-based authorized institution or licensed corporation that is a counterparty must report the trade to the HKTR within T+2. The recognized central counterparty (CCP) exemption does not apply, as CFETS is not a recognized market, SHCH is not on the prescribed list and mainland submission to CFETS does not fulfill the Hong Kong reporting obligation.

Each Swap Connect trade conducted in Hong Kong is therefore reported twice – to CFETS by the mainland participant and to the HKTR by the Hong Kong counterparty.

Swap Connect traded notional data became available via CFETSONline Release in May 2023. Monthly traded notional rose steadily from \$8.4 billion in May 2023 to \$33.1 billion by April 2024 and totaled approximately \$250 billion over the first 12 months of reporting¹⁴. In the full year 2024, Swap Connect recorded approximately \$500 billion in traded notional – about 11% of mainland China’s total.

⁹ About CFETS www.chinamoney.com.cn/english/mdtrptmbl/

¹⁰ Addressing Legal Barriers to Reporting of, and Access to, OTC Derivatives Transaction Data www.fsb.org/uploads/China.pdf, Investing in China’s Interbank Bond Market: A Handbook www.icmagroup.org/assets/documents/About-ICMA/APAC/NAFMII-and-ICMA-Investing-in-Chinas-Interbank-Bond-Market-Handbook-September-2021-230921.pdf

¹¹ Swap Connect: PBOC publishes much-awaited proposed rules www.kwm.com/cn/en/insights/latest-thinking/swap-connect-pboc-publishes-much-awaited-proposed-rules.html

¹² Swap Connect transactions are cleared at the Shanghai Clearing House via OTC Clear, so CFETS also captures CNY IRD traded and cleared under Swap Connect

¹³ Frequently Asked Questions on the Securities and Futures (OTC Derivative Transactions) – Reporting and Record Keeping Obligations Rules <https://hktr.hkma.gov.hk/GetFile.aspx?databaseimageid=748996>

¹⁴ CFETSONline Release, an official WeChat account, first disclosed monthly figures for May 2023 and April 2024 – plus a one-year aggregate – noting steady growth over that span. Monthly values for June 2023 to March 2024 were interpolated on a steady-growth path – daily averages (RMB) converted to US dollar × trading days, so the segment totals the given traded notional of RMB 1.77 trillion. Actual reported monthly data is used from April 2024 onward

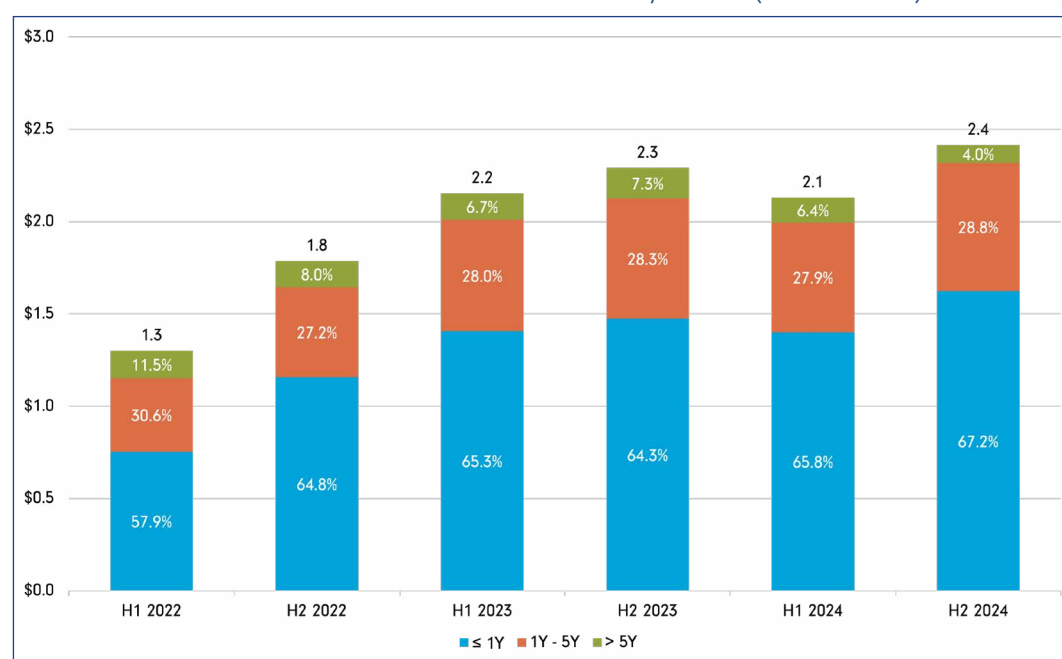
Tenor Concentration

The IRD market in mainland China remains concentrated in shorter tenors due to the lack of a long-term benchmark yield curve, the dominance of short-term funding, a limited investor base for long-term hedging and evolving regulatory reforms and market infrastructure.

China's interest rate environment is also heavily influenced by government policy, making long-term expectations difficult to price. Corporates typically rely on short-term loans that roll over, as some mainland China banks have limited appetite for long-term lending, partly because prudential rules tie capital charges to duration¹⁵.

In the full year 2024, short-tenor transactions (less than one year) accounted for 66.5% of total IRD traded notional versus 64.8% in 2023. Mid-tenor transactions (one year to five years) made up 28.3% of the total compared to 28.2% in 2023. Long-tenor transactions (more than five years) represented 5.1% of traded notional in 2024 compared to 7.0% in 2023 (see Chart 2).

Chart 2: Mainland China IRD Traded Notional by Tenor (US\$ trillions)



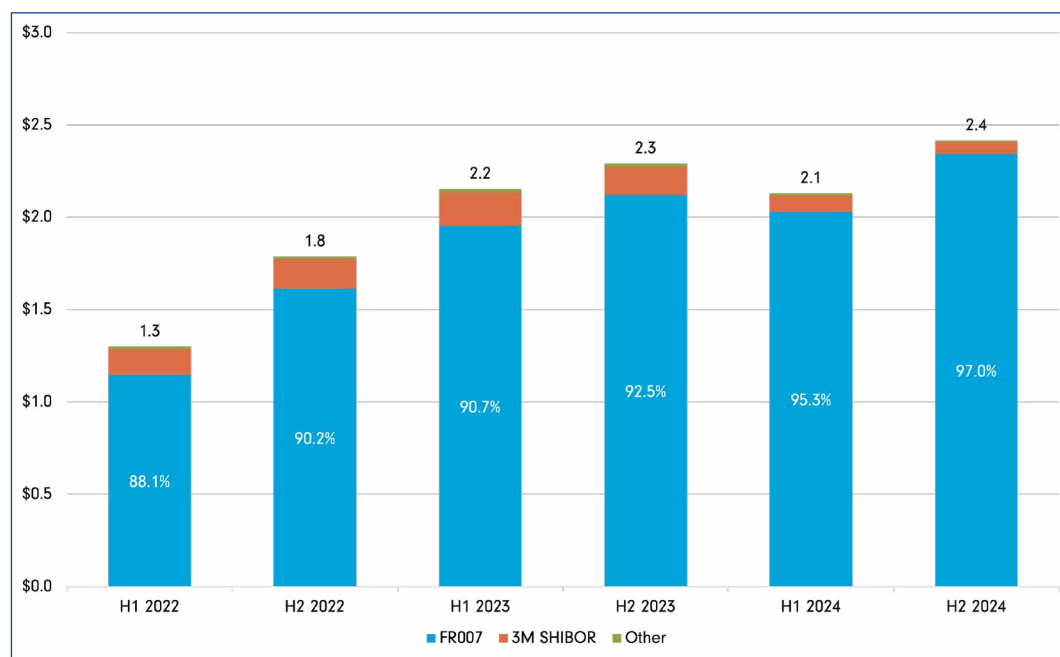
Source: CFETS

¹⁵ Corporate financialization and the long-term use of short-term debt: Evidence from China www.sciencedirect.com/science/article/abs/pii/S1544612323009741?via%3DiHub, Making China's financial system better serve the real economy www.bis.org/publ/bppdf/bispap148_e.pdf, International Monetary Fund People's Republic of China IMF Country Report www.imf.org/en/Publications/CR/Issues/2018/07/25/Peoples-Republic-of-China-2018-Article-IV-Consultation-Press-Release-Staff-Report-Staff-46121

Reference Rates

In 2024, 96.2% of all onshore IRD traded notional referenced FR007, rising by 15.5% to \$2.3 trillion in the second half of 2024 versus \$2.0 trillion six months earlier (see Chart 3).

Chart 3: Mainland China IRD Traded Notional by Reference Rate (US\$ trillions)



Source: CFETS

FR007 is the seven-day fixing repo rate, and the People's Bank of China (PBOC) actively supports it as a leading benchmark via initiatives like Swap Connect. It is often referred to as a short-term policy tool, and its movements signal the PBOC's monetary policy intentions in the short run. As a secured rate, FR007 is preferred over the Shanghai Interbank Offered Rate (SHIBOR) due to its liquidity, stability and correlation to bond yields.

SHIBOR is less liquid, reflecting an interbank lending market that is far smaller than the seven-day repo market, and can be prone to volatility. Unlike FR007's collateralized repo base, SHIBOR is also unsecured and therefore reflects counterparty risk. As a result, traded notional based on SHIBOR fell by 54.3% to \$150.3 billion in 2024 from \$328.7 billion the year before. It represented just 3.3% of traded notional in 2024 compared with 7.4% in 2023.

Other rate-based derivatives represent a small percentage of traded notional¹⁶ at \$22.1 billion in 2024 – 47.3% lower than the \$42.0 billion reported in 2023.

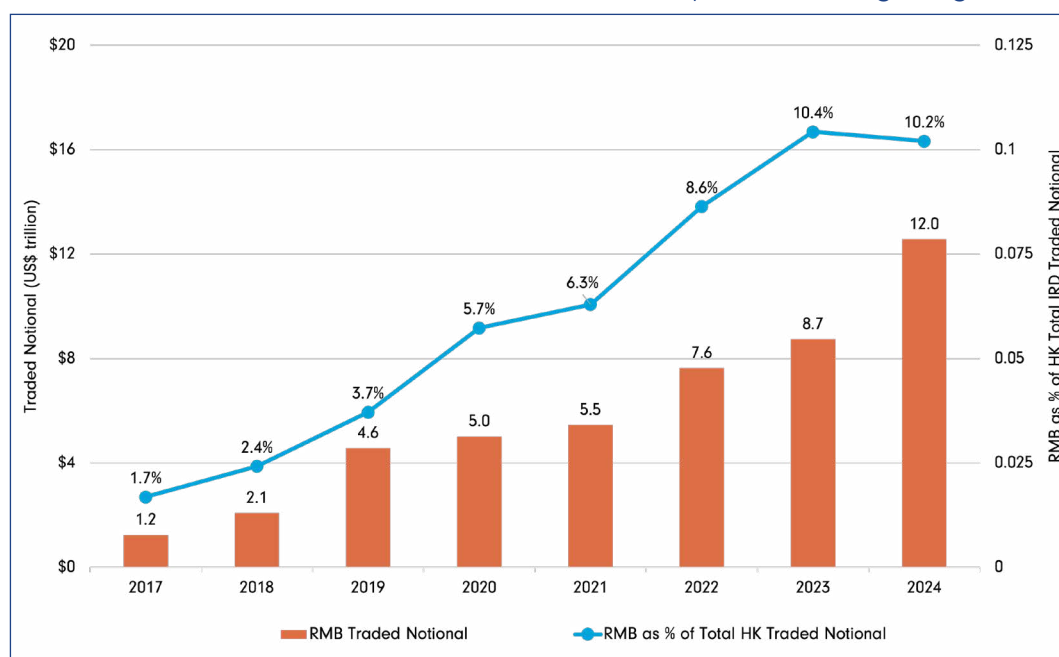
¹⁶ The 'other' category of reference rates represents the one-year loan prime rate, the China Development Bank 10-year bond yield, the spread (or ratio) between the 10-year policy bank bond and the 10-year government bond, the 10-year government bond yield, the overnight Shanghai Interbank Offered Rate, the seven-day fixing depository institutions repo rate and the one-day interbank pledged repo fixing rate

THE HONG KONG RMB MARKET

In 2024, \$12.0 trillion of RMB-denominated IRD traded notional was reported to the HKTR, a 37.5% jump from \$8.7 trillion in 2023, representing approximately 10.2% of Hong Kong's total IRD traded notional (see Chart 4)¹⁷.

In analyzing trading volumes reported in Hong Kong, it should be noted that local rules impact the level of notional reported and may result in duplicate trades. Those rules, for example, require all 'prescribed persons' to report every OTC derivatives transaction¹⁸. As a result, both the original alpha trades and those that are subsequently cleared are included in the trading volume statistics, as are intragroup transactions. More granular breakdowns of trading data are not available, and this report's analysis is based on the reported figures¹⁹.

Chart 4: RMB-denominated IRD Traded Notional Reported in Hong Kong



Source: HKTR

RMB-denominated traded notional reported in Hong Kong has risen every year since 2016, compounding at 34.8% annually. The introduction of Swap Connect's compression services in mid-2024 accelerated this trend by giving offshore investors cleaner access to onshore risk, optimizing capital usage and enabling larger transactions at lower margin requirements²⁰ (see box, *About CFETS and Swap Connect*).

¹⁷ All HKTR data is sourced from the Hong Kong Monetary Authority <https://hktr.hkma.gov.hk/ContentDetail.aspx?pageName=Data-Disclosure>

¹⁸ Prescribed persons are identified as authorized institutions, approved money brokers and licensed corporations. Recognized clearing houses and automated trading service providers that provide automated trading services and act as a central counterparty are required to report OTC transactions

¹⁹ Intragroup transactions are defined as OTC derivatives trades between affiliated entities within the same corporate group, regardless of whether the transaction is cleared

²⁰ Bond investors eye Hong Kong as offshore RMB hub as China access grows www.financeasia.com/article/bond-investors-eye-hong-kong-as-offshore-rmb-hub-as-china-access-grows/498095

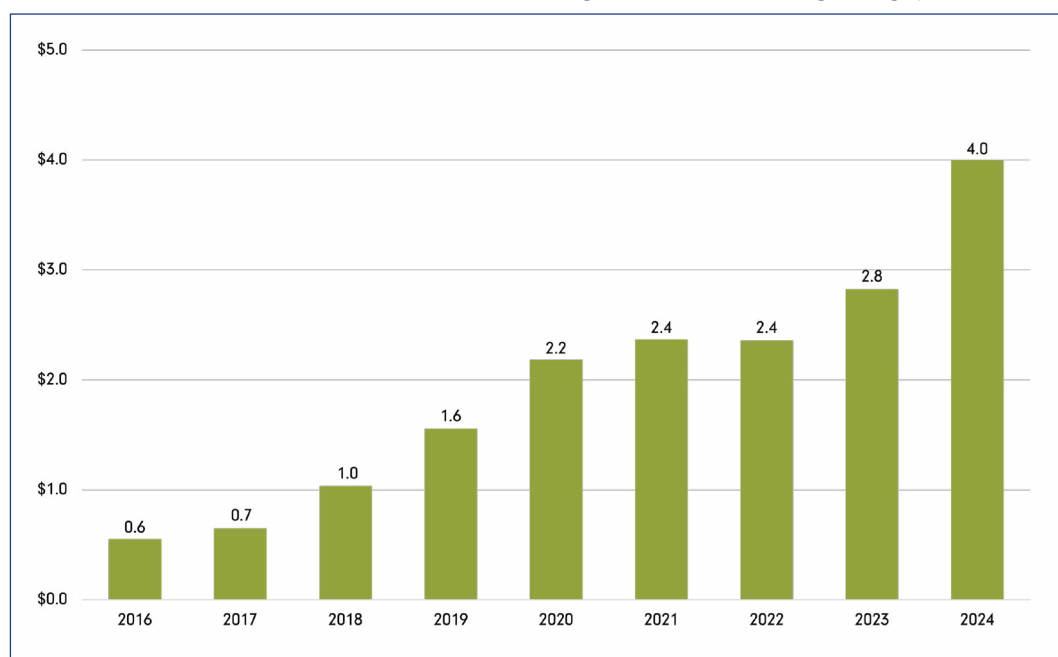
As Swap Connect trades are reported in both Hong Kong and mainland China, the headline figure embeds a small amount of double counting. CFETSONline Release data indicates this overstatement of RMB-denominated IRD traded notional reported in Hong Kong was about 4.3% in 2024²¹.

Of the \$12.0 trillion of RMB-denominated IRD traded notional reported to the HKTR, a substantial percentage appears to be RMB-denominated non-deliverable IRS settled in US dollars. The exact breakout of trades is not reported, but a 2022 report from the Hong Kong Monetary Authority showed that 85%–90% of the total reported by firms as part of the Bank for International Settlements' triennial survey consists of RMB-denominated non-deliverable IRS settled in US dollars²².

Notional Outstanding

RMB-denominated IRD notional outstanding reported in Hong Kong – which may reflect double-counting – has climbed sharply, rising by 41.5% to \$4.0 trillion in 2024 from \$2.8 trillion in 2023. Over 99% of this notional outstanding comprises fixed-for-floating IRS that mirror mainland China's FR007 structures (see Chart 5).

Chart 5: RMB-based IRD Notional Outstanding Reported in Hong Kong (US\$ trillions)



Source: HKTR

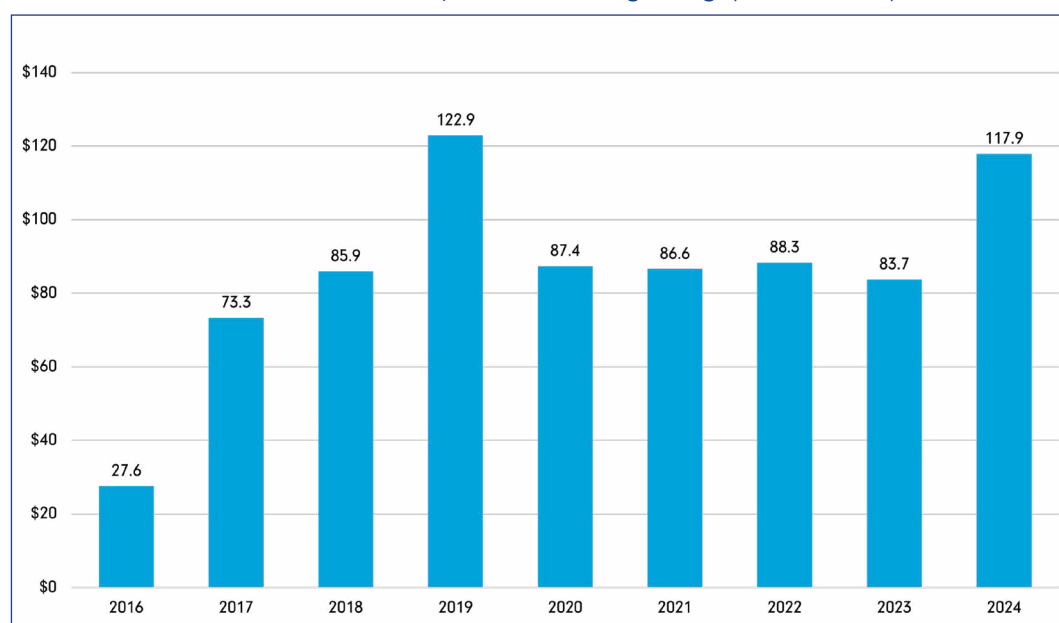
²¹ Derived by dividing the estimated 2024 Swap Connect traded notional (about \$511.6 billion) by the total RMB-denominated IRD notional reported to the HKTR (\$12.0 trillion)

²² The Foreign Exchange and Derivatives markets in Hong Kong www.hkma.gov.hk/media/eng/publication-and-research/quarterly-bulletin/qb202212/fa1.pdf

HKTR OTC IRD TRADING ACTIVITY

Hong Kong's IRD market is characterized by its global investor base and wide currency/product offerings. According to the HKTR, IRD traded notional was \$27.6 trillion in 2016, which tripled to \$85.9 trillion by 2018 and reached \$122.9 trillion in 2019 (see Chart 6).

Chart 6: IRD Traded Notional Reported in Hong Kong (US\$ trillions)



Source: HKTR

A trading peak in 2019 was likely influenced by geopolitical tensions, regulatory changes and anticipatory hedging amid potential monetary policy shifts, but the COVID-19 pandemic subsequently emerged as the main driver for market behavior.

From 2020 to 2023, annual traded notional fell to \$84 trillion–\$88 trillion as the pandemic prompted market participants to favor longer-term positions over a steady churn of new trades. Despite market stress, notional outstanding held firm, even as geopolitical and regulatory shifts continued to influence activity (see Chart 10 in Notional Outstanding section).

By the end of 2024, IRD traded notional reported to the HKTR climbed to \$117.9 trillion, representing average daily notional of \$453.3 billion.

Hong Kong Benchmarks

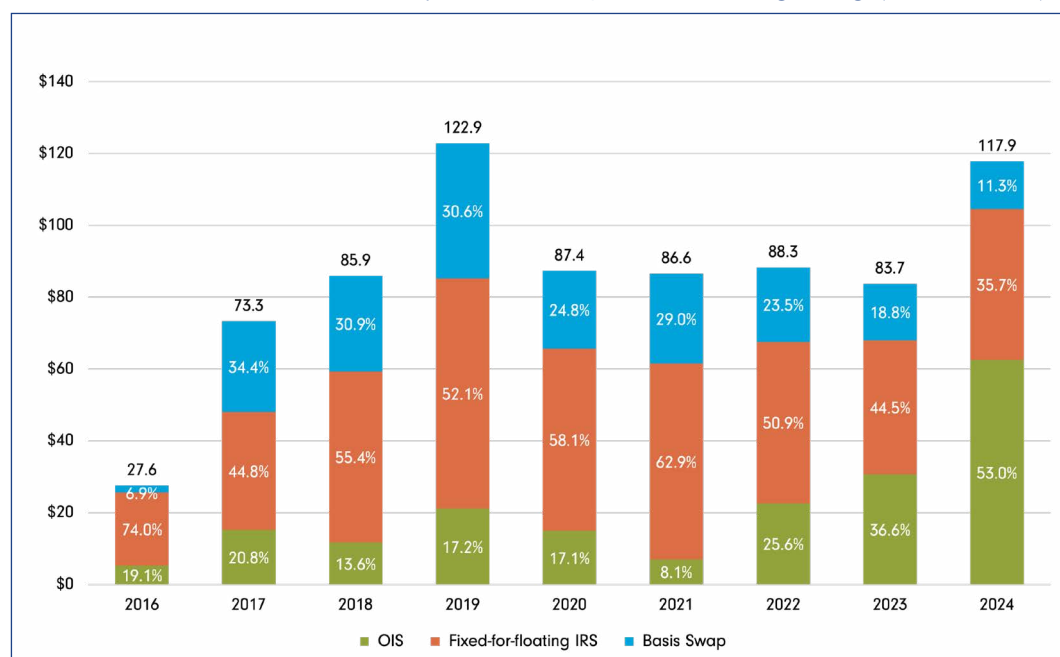
Hong Kong's primary interest rate benchmark is the Hong Kong Interbank Offered Rate (HIBOR), although the Hong Kong Overnight Index Average (HONIA) is gaining traction as client demand deepens liquidity. Hong Kong dollar IRD transactions typically reference HIBOR or HONIA, while offshore RMB derivatives reference CNH HIBOR. Unlike Singapore, the HKMA has so far opted for a multi-rate approach²³.

²³ Reform of Interest Rate Benchmarks www.hkma.gov.hk/eng/key-functions/banking/banking-regulatory-and-supervisory-regime/reform-of-interest-rate-benchmarks/ Hong Kong dealers make Honia transition push www.risk.net/markets/7961106/hong-kong-dealers-make-honia-transition-push

Product Mix

OIS traded notional grew by 103.7% to \$62.5 trillion in 2024 from \$30.7 trillion in 2023. OIS accounted for 53.0% of Hong Kong's total IRD traded notional in 2024, up from 19.1% in 2016 (see Chart 7).

Chart 7: IRD Traded Notional by Product Reported in Hong Kong (US\$ trillions)



Source: HKTR

In recent years, there has been a notable shift toward OIS, supported by transitions from IBOR-based benchmarks – such as LIBOR – to alternative reference rates like SOFR, typically categorized as OIS.

Fixed-for-floating IRS traded notional grew by 12.9% to \$42.1 trillion in 2024 from \$37.3 trillion in 2023. Historically, fixed-for-floating IRS dominated total traded notional in Hong Kong, averaging 55.3% from 2016 through to 2023. While fixed-for-floating IRS in Hong Kong remains significant – especially for RMB-based transactions linked to FR007 – its share dropped to 35.7% of total traded notional in 2024, the lowest on record.

Meanwhile, basis swap usage in Hong Kong has diminished since 2019, when traded notional was \$37.7 trillion. Cross-currency basis swaps see less demand due to the Hong Kong dollar's peg to the US dollar, so Hong Kong tends to focus on rate risk rather than multi-currency strategies. In 2024, basis swap traded notional fell by 15.7% to \$13.3 trillion from \$15.8 trillion in 2023. Basis trades represented 11.3% of total IRD traded notional in 2024.

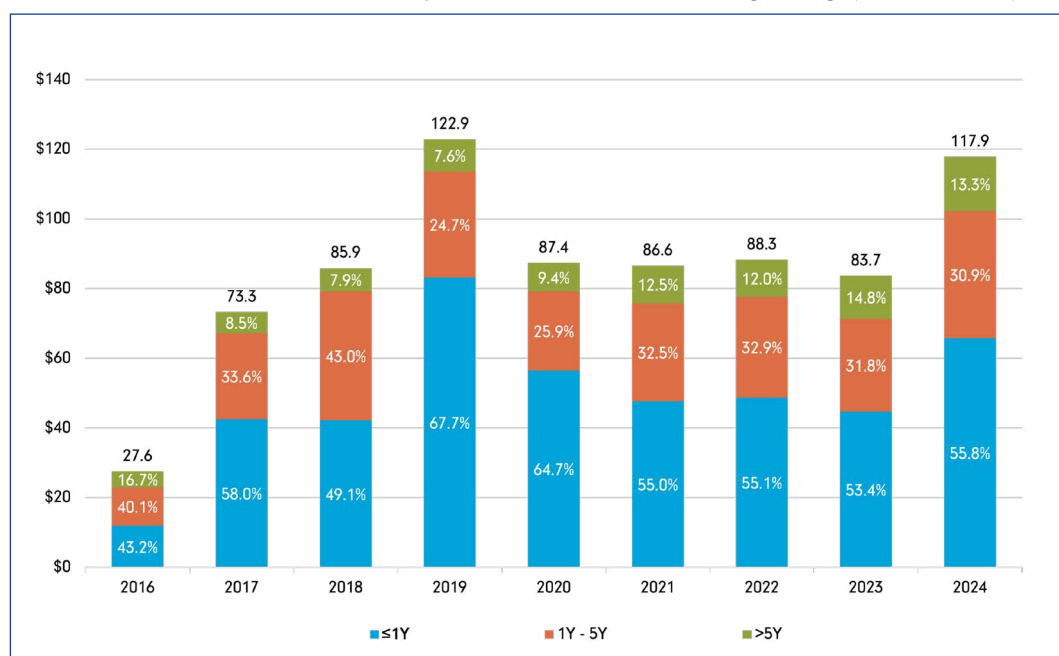
Tenor Distribution

IRD instruments in Hong Kong are transacted in a variety of tenors. Most transactions are short tenor, accounting for 55.8% of traded notional in 2024 compared to 53.4% the year before.

Mid-tenor transactions represented 30.9% of traded notional compared to 31.8% in 2023, while long-tenor transactions made up 13.3% of the total in 2024 versus 14.8% in 2023 (see Chart 8).

The 2024 tenor distribution sits near the midpoint of the 2016-2024 ranges – short tenor 43.2%-67.7%, mid tenor 24.7%-43.0% and long tenor 7.6%-16.7% – underscoring a persistent tilt toward short tenors.

Chart 8: IRD Traded Notional by Tenor Reported in Hong Kong (US\$ trillions)



Source: HKTR

Globally, IRD traded notional was more skewed toward short tenors in the full year 2024.

- In the US, 68.2% of traded notional had a tenor of less than one year, 22.2% had a tenor between one and five years and 9.7% had a tenor over five years²⁴.
- In the EU, 71.5% of IRD traded notional had a tenor less than one year, 15.1% had a tenor between one and five years and 13.3% had a tenor over five years²⁵.
- In the UK, 74.9% of traded notional had a tenor less than one year, 15.0% had a tenor between one and five years and 7.7% had a tenor over five years.

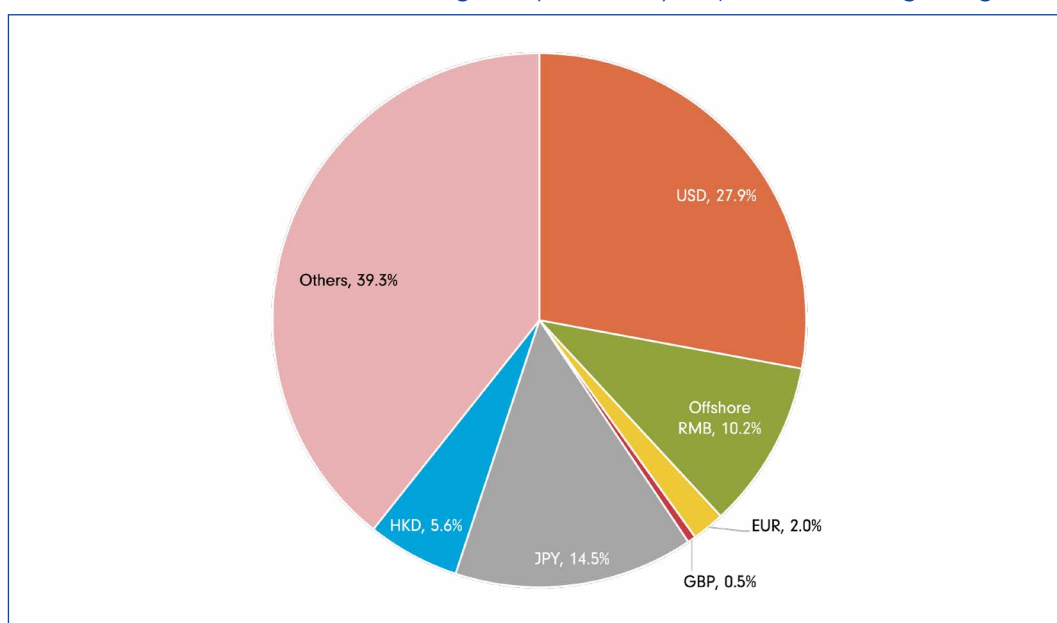
²⁴ SwapsInfo Full Year 2024 and the Fourth Quarter of 2024 www.isda.org/2025/02/20/swapsinfo-full-year-2024-and-the-fourth-quarter-of-2024/

²⁵ Interest Rate Derivatives Trading Activity Reported in EU, UK and US Markets: Full Year 2024 and the Fourth Quarter of 2024 www.isda.org/2025/03/19/interest-rate-derivatives-trading-activity-reported-in-eu-uk-and-us-markets-full-year-2024-and-the-fourth-quarter-of-2024/

One factor behind mid-tenor transactions is the Medium-Term Lending Facility (MLF) rate – often influencing the Loan Prime Rate (LPR), which shapes borrowing costs over one year^{26,27}. When the PBOC adjusts the MLF rate – an operational policy benchmark – bank funding costs respond promptly, which flows through to loan pricing and reshapes market expectations. These shifts can trigger increased trading in mid-tenor instruments as investors hedge and reposition their exposures based on the revised rate trajectory and updated economic outlook.

Alongside the 10.2% share of RMB-denominated trades, 27.9% of Hong Kong IRD traded notional in 2024 was denominated in US dollars, 14.5% was denominated in Japanese yen and 39.3% was in other currencies, confirming Hong Kong's role as a multi-currency rates market (see Chart 9).

Chart 9: IRD Traded Notional Weights by Currency Reported in Hong Kong



Source: HKTR

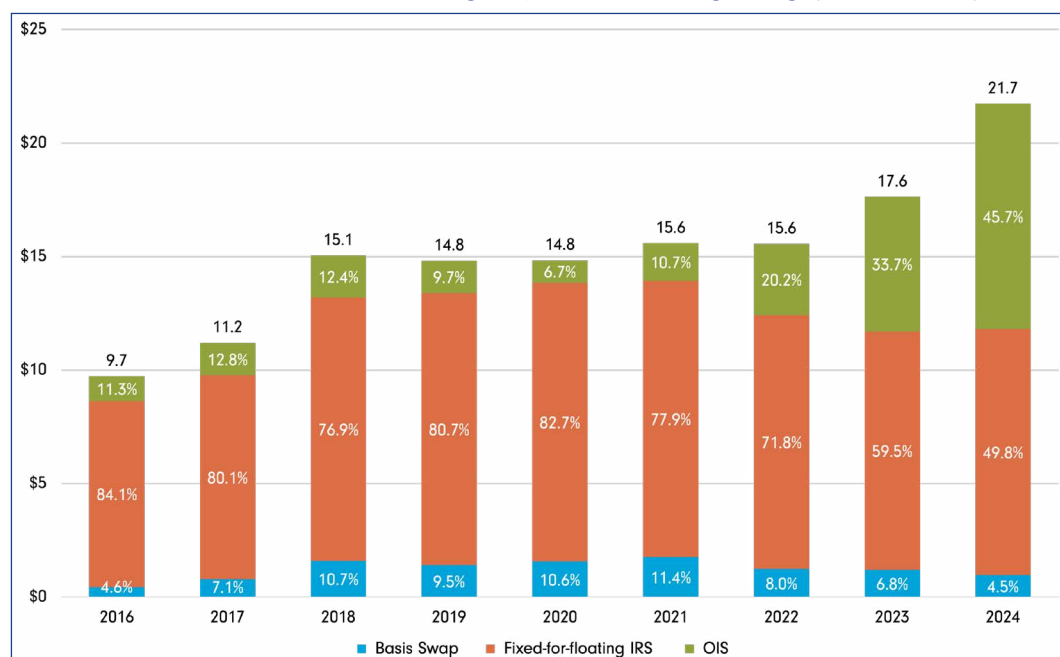
²⁶ China's Monetary Policy Framework and Financial Market Transmission www.rba.gov.au/publications/bulletin/2024/apr/pdf/chinas-monetary-policy-framework-and-financial-market-transmission.pdf

²⁷ China to enhance Swap Connect by extending tenor, use loan prime rate as reference www.scmp.com/business/markets/article/3310522/china-enhance-swap-connect-extending-tenor-use-loan-prime-rate-reference

Notional Outstanding

IRD notional outstanding reported to the HKTR rose from \$9.7 trillion in 2016 to \$17.6 trillion in 2023, then to \$21.7 trillion in 2024, representing 23.3% year-on-year growth and a nine-year compound annual growth rate of 10.6%²⁸ (see Chart 10).

Chart 10: IRD Notional Outstanding Reported in Hong Kong (US\$ trillions)



Source: HKTR

From 2016 to 2021, fixed-for-floating IRS dominated market activity, representing 81.9% of total IRD notional outstanding. By 2022, OIS had begun taking a larger share, rising from \$1.7 trillion in 2021 to \$3.2 trillion in 2022, and then to \$5.9 trillion in 2023.

OIS notional outstanding climbed by 67.2% to \$9.9 trillion in 2024 versus the year before. It has grown by 31.7% annually since 2016 and now represents 45.7% of all IRD notional outstanding in Hong Kong. By contrast, fixed-for-floating IRS outstanding increased by 3.2% to \$10.8 trillion in 2024 from \$10.5 trillion in 2023, representing 49.8% of notional outstanding. Basis swaps traded notional outstanding fell by 18.6% to \$975.4 billion – a third consecutive yearly decline – representing 4.5% of notional outstanding.

²⁸ CFETS does not report the notional outstanding of mainland China IRD

CONCLUSION

Mainland China recorded \$4.5 trillion in IRD traded notional in 2024, up by 47.2% since 2022. Liquidity remains concentrated in FR007-linked swaps (96.2% of volume) and in short-tenor contracts of one year or less, which account for two-thirds of activity.

Regulatory milestones, including the Futures and Derivatives Law and the launch of Swap Connect, have deepened liquidity, expanded offshore access and cemented the role of FR007, positioning the onshore market for its next phase of growth.

The RMB-denominated IRD market continues to grow in Hong Kong and traded notional totaled \$12.0 trillion in 2024. Most of this volume is believed to be RMB-denominated non-deliverable IRS.

Total IRD traded notional reported to the HKTR reached \$117.9 trillion in 2024. OIS transactions continue to grow, representing more than half the volume, reflecting both global benchmark reform and heightened demand for short-dated hedging instruments.

ISDA HAS RECENTLY PUBLISHED OTHER RESEARCH PAPERS:

ISDA Margin Survey Year-end 2024

www.isda.org/2025/05/14/isda-margin-survey-year-end-2024/

Interest Rate Derivatives Trading Activity Reported in EU, UK and US Markets: Full Year 2024 and the Fourth Quarter of 2024

www.isda.org/2025/03/19/interest-rate-derivatives-trading-activity-reported-in-eu-uk-and-us-markets-full-year-2024-and-the-fourth-quarter-of-2024/

SwapsInfo First Quarter of 2025

www.isda.org/2025/05/27/swapsinfo-first-quarter-of-2025/

FOR QUESTIONS ON ISDA RESEARCH, PLEASE CONTACT:

Olga Roman

Head of Research

oroman@isda.org

Adam Perlaky

Director of Research

aperlaky@isda.org

Melissa Yu

Assistant Director of Research

hyu@isda.org

ABOUT ISDA

Since 1985, ISDA has worked to make the global derivatives markets safer and more efficient. Today, ISDA has over 1,000 member institutions from 76 countries. These members comprise a broad range of derivatives market participants, including corporations, investment managers, government and supranational entities, insurance companies, energy and commodities firms, and international

and regional banks. In addition to market participants, members also include key components of the derivatives market infrastructure, such as exchanges, intermediaries, clearing houses and repositories, as well as law firms, accounting firms and other service providers. Information about ISDA and its activities is available on the Association's website: www.isda.org. Follow us on [LinkedIn](#) and [YouTube](#).